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Medical and Surgical
JOURNAL

OFFICIAL ORGAN of THE MASSACHUSETTS MEDICAL SOCIETY and of THE NEW ENGLAND SURGICAL SOCIETY

$5 per Annum. 15c per copy
Vol. CLXXXIV, No. 24

THURSDAY, DECEMBER 9, 1920

Published weekly in Boston, at 126 Massachusetts Avenue

183 = 24

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MEDICINE.

AN EXPERIMENTAL AND CLINICAL STUDY OF WHOOPING-COUGH.

MACHT, D. I. (*Johns Hopkins Hosp. Bull.*, July, 1920), as a result of an experimental and clinical study of whooping-cough, is of the opinion that:

1. The administration of benzyl-benzoate solution alone and, still better, in combination with small doses of benzaldehyde, exerts a beneficial palliative effect on the violence and number of whooping-cough paroxysms.
2. The mode of action of the drug in such cases has been investigated experimentally and is discussed in the text.
3. In view of the low toxicity of benzyl-benzoate and benzaldehyde, and the considerable number of successful therapeutic results obtained with them, their further trial in the symptomatic treatment of paroxysmal cough, and especially of whoopng-cough, is deemed advisable. [J. B. H.]

PELLAGRA.

BOYD, F. D. (*Edin. Med. Jour.*, June, 1920), in an interesting article, discusses the occurrence of pellagra among the Turkish prisoners of war. His conclusions in regard to this condition are as follows:

1. The clinical features of the disease are those of a profound suprarenal inadequacy.
2. There is no evidence from clinical and pathological findings of any specific protozoan or bacterial infection.
3. Digestive disturbance accompanied by defective secretion of hydrochloric acid leads to disturbance of pancreatic functions, defective digestion, and malassimilation of protein and fat.
4. There appears to be an intimate connection between the proportion of biological protein in the diet and pellagra. The relation between maize and pellagra appears to be due not to any toxic properties inherent in maize, but to the poverty of maize in biological protein.
5. The disease produces a loss of resistance to the invasion of bacterial and protozoan disease, and is, therefore, a contributory factor to a very high rate of mortality. [J. B. H.]

TREATMENT OF THE DISEASED GALL-BLADDER.

WARREN (*Practitioner*, August, 1920), in considering the early diagnosis of gall-stones, emphasizes the fact that gall-stones are a very fertile source of dyspepsia, especially in middle-aged women. In such persons, the occurrence of pain or discomfort after meals, associated with nausea, and sometimes with vomiting which does not relieve the pain, and which is accompanied by the formation of gas, often troublesome at night, causing discomfort in the chest, should render one suspicious of gall-stones. The two classical signs of pain, severe and spasmodic enough to warrant the term colic, and jaundice, are often wanting for a long period. Definite tenderness over the gall-bladder will make the diagnosis positive; but this is often absent. [J. B. H.]

(Continued on page vi.)

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(Continued from page iv.)

SURGERY.

ADENO-SARCOMATOUS TUMORS OF THE KIDNEY.

FRASER (*Edin. Med. Jour.*, June, 1920), in a long article, profusely illustrated, discusses the adeno-sarcomatous tumors of the kidney, having gone over the records of his hospital for the past 20 years, and describes the investigations of others on this subject. He makes a careful analysis of both the clinical and pathological features.

He describes the various modern views in regard to such tumors, the method of spread and metastasis of the tumor, and finally takes up diagnosis, treatment, and prognosis. [J. B. H.]

LUMPS IN THE BREAST.

ADAMS, J. E. (*Practitioner*, September, 1920) discusses the general subject of tumors of the breast. Such tumors may be divided into three classes:

1. Cases which must be operated upon without delay.
2. Cases in which surgical delay is permissible or non-operative treatment desirable.
3. The scope of the operation.

He discusses the treatment of each one of these classes in considerable detail.

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3. Excision of breast, leaving the skin and nipple.
4. Excision of a wedge-shaped portion of the breast. [J. B. H.]

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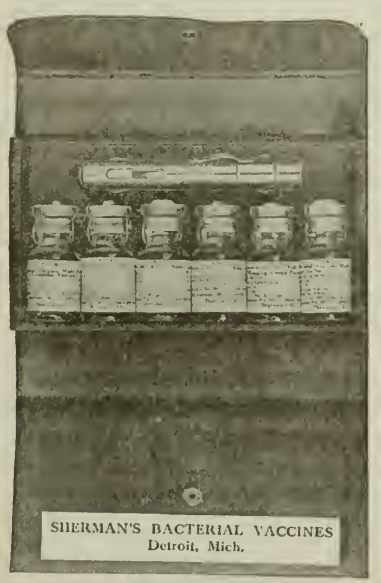

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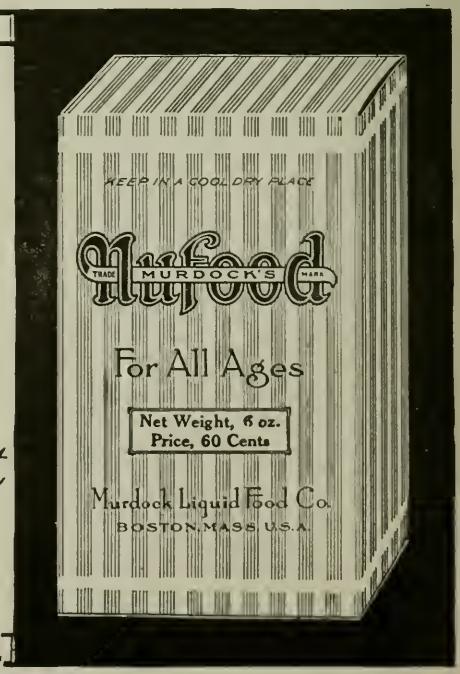

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THE SYPHILIS CLINIC:

ITS ORGANIZATION, EQUIPMENT AND PERSONNEL.

BY HERMAN GOODMAN, B.S., M.D., NEW YORK CITY.

FOR many centuries, those suffering with the so-called venereal diseases were looked upon as social lepers. Hospital boards refused to take cognizance of the fact that these people were sick and needed care. Venereal diseases were always the result of wrong doing was their mistaken idea, and "as they sow, so shall they reap," was the general attitude.

Most out-patient dispensaries had a clinic called the Genito-urinary Department and cases of syphilis most often came to it. Gynecological clinics received many patients with infectious syphilitic lesions, but the attending physicians were more interested in the surgical aspects of their specialty. The dermatologists have always been specially interested in syphilis, and the skin clinics have been prepared for the treatment of syphilitic cases.

The impetus given to the social hygiene movement by the late war has made it desirable to outline the organization of a clinic for the ambulatory cases of syphilis.

THE LOCATION OF THE CLINIC.

I am convinced that the best results are obtained if the syphilitic clinic is part of a polyclinic or general dispensary. Many patients may hesitate to enter a special infirmary devoted to syphilis as a needless exposure of their condition. The patient may be ignorant of the syphilitic nature of the malady for which he or she seeks relief, and the various departments of a polyclinic direct such patients to the proper clinic in the same establishment, with more certainty of their going than if the syphilis clinic were an independent unit. (I take into consideration that the ideal condition of having a physician do the admitting at the clinic office is not generally practised.) It is equally desirable for the syphilis department to have the specialists in eye, ear, nerve, and general medicine accessible for consultation, and for special examinations. The dispensary dental clinic coöperation is desirable.

I am equally convinced that the linking of the department of syphilis with the skin department serves best. Because of the multiplex expression of the syphilitic diseases on the skin, the dermatologists have taken the greatest interest in syphilis, and the skin specialists will be the men in the community best equipped for the work.

The overhead expense of superintendent, ad-

mission clerks, pharmacy, janitor service, etc., is better borne by a general dispensary than by a single clinic, and the per visit cost is materially reduced. The general clinic will also have beds available for the syphilis department either in an affiliated hospital, or its infirmary.

CLINIC SPACE.

Unfortunately, most dispensaries, and outpatient departments of hospitals are not architecturally constructed with the needs of the syphilis clinic in mind. All too often, the activities of a syphilis department are confined by the physical limitations of the space assigned to it. Naturally, the clinic space should be sufficient for the expected needs of the clinic at its period of expansion, and not for the estimated immediate need, for then there will be no expansion except at the cost of efficiency or removal. Where possible a detached building connected by corridor to the main dispensary entrance should be used, providing it admits of giving more room to the syphilis clinic at some later date. This may be arranged, for example, by having an upper story in such a building used temporarily for some other purpose.

The syphilis clinic should have a waiting room. Separate waiting rooms for men and women are desirable; separation of white and black is not essential in most localities. The desk of the department's clerk may well be located in the waiting room. The clinic rooms should, if possible, be arranged about the waiting room.

There should be separate, but connecting rooms for (1) the social service, and (2) appointment office (which may also be used for the records and storage of supplies); (3) another room for the clinical examination of the patients which should have several undressing cubicles; (4) a separate room for the dark field examinations, in which room the blood for Wassermann may also be drawn and the urine examined. There should be (5) a dental outfit exclusively for syphilitic patients, (6) a room for the injection of salvarsan, and for mercury; and (7) an infirmary for the spinal puncture cases, which has a small kitchenette equipment.

As the need for room came, the infirmary could be removed to the second story immediately above the clinic, and the space utilized for another salvarsan injecting room, x-ray, photographic room, office of the director, syphilis department dental office, etc.

Of course, one room may serve in a small clinic for Wassermann, salvarsan, and mercury injection. The infirmary may be replaced by an assignment of beds in the affiliated hospital. The pharmacy is that of the general dispensary.

If the syphilis department is to be used at night, and the other clinics are not open evenings, it is especially desirable to plan the location of the clinic so that the patients do not have to pass through other clinic rooms, innumerable halls, etc.

Lavatories should be provided with sanitary paper seats.

CLINIC HOURS.

The syphilis clinic should be open during the other hours of the dispensary, and in addition, at least three evenings each week for those whose absence from work during the day would jeopardize any position they might have, and yet whose earnings do not enable them to pay the cost of modern syphilitic treatment with a private physician.

CLINIC PATIENTS.

I believe that every patient who applies to a clinic for treatment should be admitted. The laws in many states licensing clinics also restrict them to the deserving poor. It is difficult today with the ever increasing cost of necessities to define the "deserving poor," and certainly in the case of syphilitic patients the clinic is in an especial relation because of the public health bearing of early and persistent treatment which may be beyond the financial reach of many people who for minor ailments would ordinarily consult a private physician, or be referred to a specialist. Many estimates have been made of the abuse of clinics by patients able to afford other treatment, and the average of about two to three per cent. found as such does not warrant the rigid cross-examination applied at some clinics.

CLINIC FEE.

The initial fee at the dispensary should be at least double if not five times the cost of the second and subsequent visits. This is the logical method to suppress the vicious habit that some patients have of floating from one clinic to another. Every clinic should, however, be so constituted that if the patient states he is

unable to pay, this larger fee be remitted, or loaned to the patient. A standard fee of twenty-five cents for the dispensary is moderate, but ten cents is still charged by many dispensaries despite the heavier cost of service, and it is estimated that fifty cents comes nearer to the cost per visit than twenty-five.

All except the needy patient should pay for medication. Arsphenamine (salvarsan) is now sold to dispensaries at a price low enough to enable the clinic to inject doses of this drug at about two dollars a treatment, and still have a surplus to give free treatments from the arsphenamine (salvarsan) fund. Mercury injections should cost about twenty cents. Medicine received on prescription at the central pharmacy is sold at regular dispensary rates.

The advisability of the "pay clinic" especially for the evening syphilis clinic should be seriously considered. There are many patients, working by day, who can ill afford to lose a day's or half day's work, and yet are not earning enough to pay for competent private treatment. They are willing to pay what they can afford, which is something above the immediate cost of the treatment to the clinic. Such patients may be treated at the night clinic, paying one dollar for the admission, and five dollars for the arsphenamine (salvarsan). The profit from such a clinic is usually divided between the clinic's contingency fund, and the doctors constituting the staff.

The provisions of the United States Public Health Service, State and Municipal health departments for distribution of free arsphenamine (salvarsan) and other aids in the treatment of syphilis should be reviewed by the managers of the prospective clinic as they differ in various states, according to the financial grant which each state adds to the money allotted to it. The Interdepartmental Social Hygiene Board should also be consulted as to possibilities of monetary and other aid. It is rarely possible for a clinic to be self-supporting. A clinic should be endowed or assured of some outside source of revenue.

MEDICAL PERSONNEL.

The syphilis clinic should have as its director a man well trained in the intricacies of general medicine, in addition to being a good dermatologist, with some knowledge of serology. He should be interested in the prevention of syphilis, hence skilled in the technic of modern bacteriological diagnosis, and familiar with the biology of the causative organism. He should be adept in the niceties of intravenous and intraspinous therapy. Almost every community large enough to support a syphilis clinic has such a man.

Associated with the director, should be at least two assistants, who may serve on alternate days as chief of clinic if the organization warrants it. These may be younger men, anxious to learn. The presence of an associate stimulates keenness of observation, curtails sloppiness, improves technic, and trains a man to maintain the clinic in the absence of the director.

The system of rapid rotation of attending physicians, where these are available, cannot be too strongly condemned. Two services at most may run throughout the year; one, Monday, Wednesday, Friday and the other Tuesday, Thursday, Saturday. The men on night clinic are selected from those attending both clinics. The director should have supervision over the entire service.

Consultants for eye, nerve and medical diagnosis should be attached to the syphilis clinic, or subject to call if in a polyclinic.

NURSING.

A full-time nurse is essential. She aids in the examination of the female patients, does the sterilizing and in due time becomes expert in the taking of blood samples. Some clinics during the war shortage of physicians have trained nurses to administer mercury to women, and to administer arsphenamine (salvarsan). I do not advise these last procedures, on the medicolegal involvement, alone.

SOCIAL SERVICE.

A trained worker in this field is a desirable adjunct to the clinic. In the small clinic, the nurse may combine the two functions. The mistake of perverting the social service into a financial rating bureau should not be made. The volunteer worker in social service in the syphilis clinic is not desirable.

CLERKS.

A cheerful, interested, and friendly clerk, who knows the alphabet and how to file cards properly is a boon to the clinic. Any other kind is useless.

RECORDS.

The syphilis clinic should keep its own file, and if in a general clinic, this may be a duplicate file. This facilitates study by the doctors, and is a check against records "lost" in the general office, or cards carried away by the patients.*

ADVICE TO PATIENTS.

Each patient receives on his first visit a sheet of instructions, with directions to read it carefully or to have it read to him. Such a sheet should not preach a lengthy sermon on morality, as some examples of this type of literature do, nor should it be pessimistic as to possibilities of ultimate and complete eradication of the disease. The following is taken from the best example of this kind I have ever seen. It was issued by the Society of the New York Hospital.

INSTRUCTIONS FOR THOSE HAVING SYPHILIS.

(Lues, Pox, Blood disease.)

Syphilis is a treacherous and dangerous disease of the entire system and requires for perfect cure at least two, better still, three years of faithful treatment, because it is "in the blood." Healing the chancre and taking medicine for *a few weeks or months* will not cure your blood of the syphilitic poison. It is, therefore, necessary that you follow the doctor's orders most carefully. If you do not, you are in danger of having the disease appear in the future in some important part of the body like the brain, spinal cord, bones, arteries or other organs, as the liver. If you do not follow directions it is possible that your wife and children will acquire the disease from you.

The following directions are of particular importance during the first year and whenever, if you neglect yourself, the symptoms break out again.

Intoxicating liquors in all forms must not be taken, because alcohol is a poison which added to the poison of the syphilis, makes the syphilis much less likely of perfect cure.

Do not smoke or chew tobacco, because the irritation of the tobacco increases the severity and duration of the mouth sores of syphilis. Sour, acid, peppery and spicy foods and pickles should be avoided for the same reason.

Brush your teeth and wash your mouth every night and morning. Cleanliness of teeth and mouth decreases the severity and duration of the mouth sores of syphilis.

Allow no one else to use your tooth brush.

Have a dentist treat your teeth if they are bad. Tell him at the first visit that you have syphilis, so that he may take precautions against catching the disease himself and giving it to other patients.

To prevent giving the disease to your family, friends, and associates, observe the following rules strictly:

Always sleep alone.

Always use only your own toilet articles, such as towels, brushes, combs, shaving brushes, razors, soaps, etc.

Always avoid kissing anyone, especially children.

Sexual intercourse must not be had during the first year, and during any fresh outbreak after neglect of treatment, because you are then certain to give the disease to the woman.

Always burn dressings which have been on open sores or wounds.

If you disobey these directions you will certainly give the disease to innocent persons.

You should always tell any doctor who is treating you for any other disease in the future that you have had syphilis, because this fact often alters the treatment of the disease. It will therefore be entirely to your own benefit for the doctor to know about your syphilis.

PERSONAL TOUCH.

In addition, the director or one of his staff, speaks to the patient and tries to convey the necessity of immediate and continuous treatment. He points out in the clinic waiting room, one of the gray haired patients, and advises the new arrival to go over and talk to one who had neglected treatment fifteen years ago. These older men go into the details of their case, and dilate on the important fact that they had felt entirely well until recently, when the disease came back! Some patients deem syphilis a death sentence. They speak of the uselessness of therapy, and threaten suicide. To these, the doctor is cheerful of the outlook, and promises cure if the patient comes as often and as long as asked. I consider it of prime importance that this task not be delegated to anyone by the director or chief of clinic. A few moments spent in this way keeps the patient

* About five per cent. of the records in clinics where the patient carries his history back and forth from the office are lost by this form of clinic abuse. It can readily be remedied by having pages carry the history to the clinic from the office, etc.

off the "one visit" list. Incidentally, whenever a syphilis clinic is inclined to get that feeling of "this is the best in the country," it should prepare its "one visit" list.

FOLLOW-UP.

I think that I have indicated above that a system of "take-up" is superior to follow-up. Every failure to attend the clinic can not be followed up, because a proportion of the patients give false names and false addresses. This proportion is smaller in the general dispensary, than in one devoted solely to syphilis, for evident reasons.

A small group of patients come to the clinic who are transients. They give a boarding-house as an address, or some ship. Some patients will come to the clinic to have the diagnosis of a private doctor confirmed, and being assured that they really have syphilis, report back to the doctor. I have already mentioned the group that carry the history card bearing the diagnosis away from the clinic. There will also be a number of patients under treatment by private physicians who come to the clinic for the Wassermann test, or for arsphenamine (salvarsan) injections, who are not able to pay their physicians for these services, but who do pay for mercury injections, for example.

If the syphilis clinic wishes to maintain a follow-up system, it should engage a full time trained worker in this field. The habit of sending postal cards to those failing to attend is pernicious, if not criminal. If the mails are to be used, first-class sealed letters only should be sent, and a non-committal return address, or a postoffice box number, used. I do not wish to under-rate the work the follow-up nurse does

A

THE DISPENSARY
DEPARTMENT OF SKIN DISEASES, etc.

NAME AGE SEX
W B
ADDRESS
OCCUPATION DATE

NURSE

History

Syphilis....Primary Spirochetes.....
Secondary
Later

Wife? Children? Miscarriages?
TREATMENT had.....salvarsans, last on.....
Had... ...mercury inj " " .....
WASSERMANN at.....Laboratory was.....on.....
Last " ".....

DIAGNOSIS

PRESENT CONDITION.

Spirochete examination.....

Serological examination.....

Social examination.....
Source of infection:
Others exposed?
Wife?
Children?
Pregnant now?

B

CONTINUATION HISTORY, SUPPLEMENTARY EXAMINATIONS, PROGRESS OF THE CASE, NOTES, etc.

PAGE TWO

C

BLOOD WASSERMANN					
DATE	ANTIGEN I	ANTIGEN II	DATE	ANTIGEN I	ANTIGEN II
		PAGE THREE------UPPER HALF			

D

CEREBRO SPINAL FLUID					
DATE	PRESSURE	CELLS	WASS. C. DILUTN	COLLOIDAL GOLD	NOTES
		PAGE THREE--- ---LOWER HALF			

E

THERAPY				
DATE	MERCURY	ARSPHENAMINE	POTAS. IODID	INTRASPINOUS
		PAGE FOUR		

accomplish, but I do wish to emphasize the fact that the ideal time for attack is when the patient is at the clinic, and that the proper person to convince the patient is the doctor.

A SUGGESTED HISTORY FORM FOR THE SYPHILIS CLINIC.

A folded sheet 14x10 to make four pages does exceptionally well.

EQUIPMENT AND SUPPLIES

For Syphilis Clinic Proper: Renewed as Required.

Acid acetic, ½ lb. in bottle	Botts.	1
Acid hydrochloricum, ½ lb. in bottle	Botts.	1
Acid nitricum, ½ lb. in bottle	Botts.	1
Adrenaline chloride, 1 mgm. tablets, 20 in tube	Tubes	5
Aether, ¼ lb. in tins	Tins	5
Aethylis chloride, 3 oz. in tube	Tubes	5
Alcohol, 5 gallons in bottle	Botts.	1
Collodium, 1 oz. in bottle	Botts.	1
Glycerinum, 1 lb. in bottle	Botts.	1
Hydrargyri chloridum corrosive tablets, 250 in bottle	Botts	1
Hydrargyri chloridum corrosive, 3 oz. in bottle	Botts.	1
Hydrargyri salicylas, 1 oz. in bottle	Botts.	6
Iodum, 1 oz. in bottle	Botts.	1
Normal saline tablets in bottle	Botts.	3
Oleum ricini, 1 qt. in bottle	Botts.	1
Petrolatum, 3 lb. tins	Tins	1
Petrolatum liquidum, 1 lb. in bottle	Botts.	2
Phenol, ½ lb. in bottle	Botts.	1
Potassii iodidi, ½ lb. in bottle	Botts.	1
Salvarsan (arsphenamine)	as required	
Sapo mollis, 1 lb. in bottle	Botts.	6
Sodii hydroxidi sticks	Botts.	1
Spiritus ammoniae aromaticus	Botts.	1
Talcum, 2 lbs. in tins	Tins	1
Thymol iodidum (Aristol) 1 oz. in bottle	Botts.	1
Unguentum hydrargyri, ½ lb. in bottle	Botts.	2
Unguentum hydrargyri chloridi mitis	Botts.	2

STATIONERY.

Baskets, letter	No.	3
Baskets, waste	No.	1
Blotters, hand	No.	12
Books, blank, crown cap, 250 pages	No.	2
Cards for filing	as required	
Envelopes with return address of clinic	No.	250
Envelopes with return address but no name	No.	250
Erasers, rubber pencil	No.	3
Erasers, typewriter	No.	1
Forms, blank	as required	
Ink, black	Botts.	1
Ink, red	Botts.	1
Inkstands	No.	2
Labels for vials, *Poison*, etc.	Gross	1
Pads, ink for stamps	No.	3
Paper, carbon	Box	1
Paper fasteners	Box	1
Paper, typewriting	Pks.	1
Paper, typewriting copy	Pks.	1
Paste, library	Jars	1
Pencils, lead	No.	12
Pen holders	No.	12
Pens, steel	Gross	1
Rubber stamps	as required	
Rulers	No.	1

MISCELLANEOUS SUPPLIES.

Bandages, gauze, assorted widths	No.	36
Basins for sponges, etc. White enamel	No.	2
Basins, hand. White enamel	No.	2
Boilers, instrument, 9 x 18 x 4 inches (arranged with gas or electricity.)	No.	1
Buckets, metal, with cover	No.	2
Cabinets, large, for instruments, dressings, etc.	No.	1
Cabinets, filing	as required	
Chairs, common	as required	
Corkscrew	No.	1
Cotton, absorbent, in roll	as required	
Desks, office	No.	2
Funnels, glass, 25 c.c.	No.	3
Gauze, plain	as required	
Gloves, rubber, sizes 7, 8, and 8½	as required	
Graduates, glass, 10, 100, 250 c.c. aa.	No.	1
Hones, Arkansas	No.	1
Irrigators, stand for	No.	1
Jars, for dressings, large	No.	1
Lamp, spirit, glass	No.	1
Medicine droppers	Doz.	1
Plaster, adhesive	Spools	6
Pus basins	No.	3
Scissors, bandage	No.	1
Shakers, salt (for powders)	No.	2
Shears	No.	1
Sheeting, rubber	Yds.	6
Soap, Ivory	Cakes	72
Tables, instrument	No.	1
Tables, operating, built as required of wood.		
Tables, typewriting	No.	1
Tongue depressors, wood	Gross	6
Tourniquets, rubber (use old rubber tubing from salvarsan)		
Trays, instrument, white enamel	No.	1
Tubing, glass assorted	Lbs.	1
Tubing, rubber, for salvarsan special .. as required		
Typewriters (characters +, ÷, & medical) ..	No.	1

LABORATORY.

I consider that the syphilis clinic will not attempt to do its Wassermann tests or colloidal gold tests, in the beginning at least, but will utilize the city health department laboratory, a central laboratory of the dispensary or affiliated hospital, or a commercial laboratory (only as a last resort, because of the expense to the patient).

Apparatus, distilling, complete	No.	1
Beakers, glass	No.	6
Bottles, dropping for cedar oil	No.	1
Brushes, test tube	No.	3
Burners, Bunsen	No.	1
Centrifuge	No.	1
Covers, glass	No.	1
Flasks, Erlenmeyer, 250, 500, 1000 c.c. aa. ..	No.	3
Gauze wire, iron	Pieces	4
Hemocytometer	No.	1
Jars, staining Coplin	No.	3
Labels, microscope	Books	1
Microscope	No.	1
Microscope and dark field condenser, complete	No.	1
Paper, litmus, blue and red, aa.	Vials	1
Pencils, wax, red	No.	1
Slides, glass, extra thin for dark field	Doz.	6
Stop cock for rubber tubing	No.	3
Test glasses, footed urinary	No.	6
Test tubes	No.	36
Test tubes, stand for	No.	1
Urinometers	No.	1
Wire, platinum, heavy	No.	1
Xylol	Botts.	1
Stains, Giemsa		
India Ink (Chin-chin)		
Reagents, Benedict's solution, etc.		

ADMINISTRATION OF MERCURY AND SALVARSAN.

Mixing cylinders with glass stoppers	No.	as required
Gravity tubes, 250 c.c., outlet at bottom, pinch cock, needle connection, glass window	No.	as required
Gravity tubes for spinal therapy	No.	as required
Needles, Fordyce	No.	as required
Needles, Spinal	No.	as required
Hypodermic syringes, 2 c.c. and needles	No.	as required
Hypodermic syringes, 30 c.c.	No.	as required

INFIRMARY.

Beds, linen, chairs, etc., etc., for infirmary as for ward elsewhere.

KITCHENETTE.

Preparation of light diets for patients. Luncheon for night nurse.

COÖPERATION OF DOCTORS.

In some communities there may be an unfortunate and ill-advised opposition on the part of certain medical practitioners against a proposed syphilis clinic. Prior to establishing a clinic in such a community I had the Commissioner of Health send out to the registered doctors the following form. I may say here that the replies were such that there could never be any complaint from the doctors that the clinic was depriving them of their means of livelihood.

REPORT OF VENEREAL DISEASE FROM CIVILIAN PHYSICIAN.

1. How many cases of venereal disease have you treated in the last
   year? .....
   month? .....
2. Do you think the number is increasing? .....
3. How many cases have you treated in the last year
   of gonorrhea? .....
   of syphilis? .....
   of chancroid? .....
4. How often have you had the body discharges examined for gonococci in the last month? .....
5. How many Wassermann reactions have you had performed on your patients in the last month? ...
6. How often has the dark field or other diagnostic method for the demonstration of the Spirocheta pallida been used in the last month? .....

7. How many Salvarsan or Neosalvarsan or their substitutes have you administered
   in the last month? .....
   in the last year? .....
8. Are these answers from your office record or from memory? .....

I hope at a later date to present the subject of the hospitalization of the syphilitic, and a consideration similar to this, on the syphilis department of the in-hospital.

TINEA CAPITIS—ROENTGEN RAY TREATMENT.

By C. Guy Lane, M.D., Boston,

Assistant Dermatologist, Massachusetts General Hospital; Assistant Physician, Department of Dermatology, Boston Dispensary.

In reviewing the work on the treatment of tinea capitis by the roentgen ray it is possible to recognize four distinct stages, or, perhaps better, the four contributions to medical science which have made this modern treatment possible. In the first place, naturally, was the discovery in 1895 of the rays now bearing the name of the discoverer. Secondly came the application of this discovery to the treatment of ringworm of the scalp by Sabouraud in 1904, although it had been first suggested by Freund in 1897. In this period was the development of technic by Kienbock, Adamson and others. The third step was the perfection of apparatus, especially the development of the interrupterless transformer by Snook in 1908, and the announcement of the Coolidge tube in 1914. More recent is the work of Shearer of Cornell on the physics of the Roentgen ray, and the practical application of his work to the treatment of ringworm and other diseases by MacKee, Remer and Witherbee, and Hazen, by the simplification of technic and standardization of apparatus.

In the treatment of ringworm of the scalp in the past, the prognosis given by various authorities varies from an indefinite number of months to a year or longer. The chief drawback to treatment by the older methods over this length of time is the fact that it offers a great opportunity for the infection of other children at schools, at play, at home, etc.; it offers a chance for a larger portion of the scalp to become infected; it offers a chance for adults to become infected, for there are a certain number of infections of the glabrous skin derived from this source. Again, such treatment is often intermittent, is not carried out carefully or thoroughly, is stopped before the disease is eradicated, with the possibility of fresh recurrence. Thus the older forms of treatment, as a whole, can be summed up as unsatisfactory. It is true that the disease disappears spontaneously at puberty, but during all this time there has been the risk of consequent infection of others, the loss to the child because of the exclusion from school, and the general unsightliness or even loathsomeness to the laity.

The more modern treatment of tinea with roentgen ray was elaborated by Sabouraud and Noire in 1909, and has been used with marked success since that time, particularly in France and England. The result which this treatment produces is not based on the fact that the tinea organism, the mycelium and the spores of the trichophyton, are affected by the roentgen ray. This is not the case. The organisms are unaffected, but the ray does cause a loosening of the hair-shaft so that in fifteen to eighteen days after exposure the hair falls out. Thus it removes the old infected hairs *in toto* with their myriads of spores and mycelia; it removes the nourishment and thus the possible source of the future growth of the organism by removing the greater part of the rest of the hair; it also permits, because of the fact that the follicles are unoccupied, an antiparasitic application to be used on the scalp with a better chance of killing off the remaining organisms in the follicles, thus increasing greatly the chances of a permanent cure in a comparatively short time. It is uncertain whether, in addition to the epilating effect, the roentgen ray produces a tissue change which renders the soil unfavorable for the existence of the parasite.

Sabouraud's technic has survived in general, but newer and more powerful apparatus has been devised, and especially apparatus with which it is possible to produce and to control properly the required current, not once, but at will, and to measure this far more accurately. In modern technic it is possible to use, in measuring the dose, certain fixed factors which produce as accurate results as the method of using a color change in pastilles, the Holzknecht or the Hampson method, for instance. This method of color change measurement depends on the effect of the roentgen ray on certain chemicals and presents the possibility for a considerable percentage of error, and, since the use of the more accurate methods developed in recent

years, particularly by MacKee, can practically be discarded at the present time.

With the perfection of the Coolidge tube the last of the four necessary constant factors to obtain a definite dose at will has been obtained. These constant factors are: (1) the intensity of the current as measured by the voltage or the spark gap; (2) the number of milliamperes through the Coolidge tube; (3) the distance of the affected part from the tungsten target; (4) the time of exposure. The Coolidge tube makes it possible by control of the amount of the current passing through the filament to regulate absolutely the intensity of the current produced, with an accuracy impossible of attainment with the gas tube. This means that by using the same spark gap, the same number of milliamperes, the same distance, and the same time at one exposure it is possible to produce the same amount of rays at will and the same result by using these same factors at any later time. It is, therefore, not necessary to measure the roentgen ray given off at each of these exposures. Enough experimental work has been done to prove that with the same four constant factors, the same results can be obtained clinically.

With any given transformer, it is advisable and really necessary to standardize this particular piece of apparatus. It is necessary first to determine three factors which one intends to use: the spark gap, the milliamperage, and the distance. The usual distance which is used in these cases is eight inches. The matter of a spark gap and milliamperage is more a matter of individual choice within certain limits. A current of sufficient intensity to produce a six or seven-inch back-up spark is ample for the purpose, and a low milliamperage has been proved sufficient. Let us take, for example, a six-inch spark gap with a current of three milliamperes passing through the Coolidge tube. It is necessary that these factors should all be accurate and that the apparatus should be in good condition. The line voltage, of course, should be constant. It is necessary that the spark gap should be six inches; that is, that the rheostat lever should be on the button which just produces a spark across a gap measuring six inches when a current of three milliamperes is passing through the tube. Moreover, it is necessary that this current measuring three milliamperes be measured by a milliamperemeter which is accurate, that is, one which has been recently checked up or tested and made accurate.

A six-inch spark gap may need further definition. I mean that with a distance of exactly six inches between point electrodes, and the switch closed, and the current at three milliamperes, there should be a spark jumping occasionally. A little closer approach of the points, or a bit more current, will, of course, make a continuous stream of sparks, and widening the spark gap or decreasing the current will prevent altogether the sparking. Having thus accurately measured the spark gap with three milliamperes through the tube, it is necessary to decide the fourth factor,—time. In the first place, this can be done theoretically according to the formula which has been recently described by MacKee, and Remer and Witherbee, based on work done by Professor Shearer of Cornell. The formula developed and established by them is as follows:

$$\frac{\text{mil-amp. (current)} \times \text{spark gap. (voltage)} \times \text{time}}{\text{distance}^2} = \text{intensity at the surface}$$

The mathematical equivalent of this formula, as determined by them, without the detail of proving this conclusion, is:

$$\frac{36}{64} = 1 \text{ skin unit}$$

This is their standard formula for unfiltered dosage. The skin unit is further explained by MacKee to be the "amount necessary to epilate scalp hair without erythema (epilating dose), or the amount necessary to provoke a slight erythema on a very sensitive part, as the face of a young girl." It is equivalent to one unit on the Holzknecht scale at skin distance or four on the Hampson. In order to find the time for one skin unit, using the figures already determined upon, namely, distance of eight inches, spark gap of six inches, milliamperage of three, these figures are substituted in the above formula as follows:

$$\frac{3 \times 6 \times T \text{ (time in minutes)}}{8 \times 8} = \text{one skin unit} = \frac{36}{64}$$

$$\frac{3 \times 3 \times T}{32} = \frac{9T}{32} = \frac{36}{64}$$

$$9T = 18$$
$$T = 2$$

Thus the theoretical time necessary for one skin

unit with the chosen factors is found to be two minutes.

Secondly, the practical determination of the time factor is done biologically. The work of MacKee, Remer and Witherbee, however, indicates that an arithmetical method can be applied with safety to any interrupterless transformer of the closed magnetic circuit type used with a Coolidge tube. In checking this factor, it is best to use a small area of skin on the flexor aspect of the forearm of a young and preferably blond female. A blond skin and skin in this region is more sensitive, and thus it is better from the point of view of safety to standardize our erythema dose on skin of this type rather than on a more resistant area or individual. Small areas, 2 or 3 mm. in diameter, can be exposed for one, one and a half, two minutes, etc., and observed for sufficient time, with the idea of establishing the time necessary to produce a faint erythema. Enough comparison of the two methods has been made to warrant the statement that with these factors the biologic measurement will check up with the theoretical one and that the time of two minutes will cause a faint erythema and likewise an epilation. Thus there are available for use the factors necessary for the production of one skin unit at will, and with these factors one is safe in attempting an epilation. Experience has proved that it is perfectly safe to administer one and one-quarter (1¼) skin units to the scalp, that is, that epilation will result from this dose and that the hair will regrow after the epilation has been completed without leaving any after effects on the scalp. Therefore a dose of one (1) to one and a quarter (1¼) skin units is advisable for epilation, but no more.

Another check can be applied to these factors by employing them first in the treatment of a marginal ringworm or to one small infected area and using the time of two minutes with the other factors as mentioned above. This is a good plan to check still further the apparatus before attempting a complete epilation according to the technic which will be described later on. As has been stated by Hazen, "it is not necessary that every hair be epilated, for the falling of the diseased hairs and the majority of the others is sufficient to effect a cure, provided the scalp is kept covered with an anti-parasitic preparation."

In the preparation of the patient, there are certain points to be observed. At the Massachusetts General Hospital a printed form has been prepared embodying the requirements to be followed by the parents who are to bring children with tinea for epilation. These directions emphasize the contagiousness of the disease, advise the use of cloth caps, and forbid the employment of irritants on the scalp for a week before treatment. They advocate the clipping or shaving of the head the day before the exposure to the roentgen ray, and outline the after-care, leaving a space to insert the date for return for observation. It is felt that all these details are necessary in order to produce the best results. When the child is brought for treatment the head is inspected for evidences of the application of an irritant, iodine, sulphur, etc., and inquiry is made to be sure that no such application has been used, in order to postpone the treatment, if such has been the case, and avoid the possibility of a resulting dermatitis.

The scalp is then measured in accordance with the Kienbock-Adamson method, which provides for the exposure of each of five points on the scalp to one skin unit of the rays, the overlapping of the rays being so distributed that every point on the scalp receives the same amount—one (1) skin unit. With indelible pencil or red ink a line is drawn over the vertex of the scalp in the median line from the anterior hair margin to the posterior hair margin. The middle point of this distance is measured and marked on this line. Two other marks are made on this line, one five inches anterior and one five inches posterior to this center mark. On both sides of the scalp above each ear and five inches distant from each of the three points on the median line are placed two other marks, making five points which have been marked on the scalp, all of which are five inches from each other, except the most anterior and posterior points, which are ten inches apart. Each lateral point is connected with the three points on the middle line, with a straight line.

In the actual process of exposing the scalp to the roentgen ray, careful attention to various details must be paid in order to secure the proper result and also to prevent untoward effects, notably a permanent alopecia. It is not possible to emphasize too much the accuracy of the various factors which have been mentioned. They should be actually measured or verified and not estimated or guessed at.

Each of these five points is exposed in turn, and a routine order of the exposures is advisable in order to avoid the possibility of exposing the same area twice. It is necessary that with the exposure of each point the tungsten target be exactly eight inches from the point and in the line of a perpendicular erected to any imaginary tangents drawn at that point. It is further necessary that the axis of the tube be parallel to a tangent. It will be found that the lines which have been drawn between the various points on the scalp will be of appreciable aid in determining the position of the tube at each exposure.

The treatment of the scalp is best carried out with the individual lying down on a wooden table with the head slightly elevated on a pillow. For exposure of the lateral points, the head is turned far over on one side and then on the other. The ears should be bent forward and held with a piece of adhesive plaster across the face, and the ears, face, neck, and shoulders should be covered with lead reaching to the hair margin. For the exposure of the most anterior point, the head rests on the occiput, tipped slightly forward, and the forehead and face must be covered in the same way with lead. For the exposure of the most posterior point, place the individual face downward, with the head bent forward and the chin against the chest so that the forehead rests on the table. In this position the neck and ears and back should be protected. For the exposure of the middle point of all, with the individual lying face downward, the head is tipped up so that the chin rests on the pillow. In this position it is advisable to cover the shoulders and possibly the ears. For the exposure of the last point, it is sometimes possible to prop the child up on pillows or sandbags and to hold the head far enough forward to obtain a proper exposure of this area with the child in the dorsal position. During each exposure, it is important, of course, that the child keep absolutely still in order to avoid the overlapping of exposures. It is seldom advisable to attempt the exposure of a child under four years except possibly for a single lesion, and then only under favorable circumstances. It is also advisable to see that the child's hands and arms are covered with a sheet of leaded rubber to reduce the possibility of his putting his hands within reach of the high tension current.

Again let me emphasize the necessity for making sure that the distance between the target and the scalp is eight inches, not eight inches and a quarter, or seven and three-quarter inches. The value of this method of treatment and its good results are due in a large measure to the accuracy with which all factors are used. Exposure of each area should be in accordance with the factors which have been found correct for the apparatus which is being used, although I feel that the figures used above will be found to be applicable, as MacKee has stated, to the use of any modern interrupterless machine of the closed magnetic circuit type, using a Coolidge tube.

Following the treatment the mother is advised to provide the child with cloth caps to be worn underneath the regular head covering, these to be changed and boiled daily, and to wash the scalp daily with castile soap and water. At the end of a week an anti-parasitic ointment, usually consisting of carbolic acid, sulphur, naphthol, in lard, is started and its application daily is continued unless there is any inflammatory reaction. The hair begins to fall out in about fourteen or fifteen days and continues for about a week, during which time scaly, slightly inflammatory patches of ringworm clear up and leave smooth, shiny, possibly slightly red areas. Regrowth starts in the course of four to six weeks and there should be no signs of reinfection provided the treatment has been carried out thoroughly. The use of a mild anti-parasitic ointment should be kept up during all this time with the idea of preventing reinfection and also to stimulate the regrowth of the hair. Of course, the old head coverings should be destroyed after the hair has fallen out, as another measure of prevention.

Roentgen ray treatment as used today, with proper precaution, in skilled hands, offers practically no risks, Hazen's statistics published in 1919 showing only two cases out of 225 treated which have any permanent alopecia, one due to the clock stopping during an exposure and the other to the moving of a patient so that certain of the areas overlapped. Sequeira states that there have been 800 cases a year treated at the London Hospital for some years past with most satisfactory results. Clinical experience has proved that there is no fear of injury to the brain from exposure to the ray. A number of cases were analyzed by Macleod in 1909 for possible cerebral injury.

In conclusion it may be stated that exposure to the roentgen ray offers the best opportunity for the quickest permanent cure of ringworm of the scalp with practically absolute safety, providing attention is paid to details in connection with not only the preparation, the actual exposure, and the after-care of the scalp, but also with the standardization and manipulation of apparatus.

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OBSERVATIONS ON THE SIGNIFICANCE OF FUNCTIONAL ALBUMINURIA IN YOUNG MEN AT HARVARD UNIVERSITY.

By D. C. Parmenter, M.D., Boston.

Instructor in Hygiene, Harvard University.

In the literature, albuminuria, without readily demonstrable cause, has been variously termed, "physiological," "postural," "orthostatic," "transitory," etc. These terms apparently were attempts to explain the occurrence of albuminuria in young adults, where no organic cause could be found.

Osler[1] speaks of functional albuminuria being influenced by posture. He also says that it may be present only during active hours, and further, that the interpretation of albuminuria as a symptom depends largely on the views we hold about idiosyncrasies as distinguished from those we hold about disease. Special interest attaches to albuminuria as associated with various nervous disturbances, the reason for which is rather obscure. It has been noted that albumen appears in the urine after apoplectic fits. Albuminuria can be induced in healthy subjects by violent exercise.[2] Holst[3] in Christiania in 1915, reported a case of a youth of sixteen who had so-called orthostatic albuminuria for five or six years. The patient later developed tuberculosis from which he died. The kidneys at post-mortem showed nothing. Holtz also reports other cases of orthostatic albuminuria with no organic defects. Further justifying the designation of functional for this type of albuminuria, others have found albumen present in the urine of children ranging in age from eighteen months to fourteen years, and could not relate it to any organic disease by various laboratory and clinical tests. Yet the cases did not correspond to the requirements for postural or for orthostatic albuminuria. It was believed that there was no significance in the appearance of this albumen. Jeanneret states[4] that this symptom may best be called "postural" albuminuria, as neither the orthostatic nor the lordotic attitude ever induces it except in the predisposed. Rollier's treatment of Pott's disease has been borne without production of albuminuria, and Jeanneret asserts that the examination of numerous children who had lordosis alone has shown no albuminuria, unless the lordosis was supplemented by an erect position and immobility. He arrived at the conclusion that moderate exercise checks the albuminuria.

Nicholson[5] in a study of school boys in England states that albumen was present in the urine of 10% of these boys after playing football, and of 18% after a three-mile run, but that each test seemed to have picked out a different set of subjects. He was unable to discover any relation to diet, or to the height of the systolic blood pressure.

Albuminuria has been associated variously with posture, with nervous disturbances, with erect immobility, and with particularly vigorous bodily activity. That this functional albuminuria predisposes to nephritis is a question open to proof and much theorizing. No very good evidence in support of this has been brought forward. In fact Barringer[6] stated that ten to eleven years after the examination of some seventy men who originally had albumen, forty per cent. still showed it. None of this forty per cent. had nephritis or symptoms thereof. He concludes from this and from some further investigations that it is exceptional for this type of albuminuria to be a symptom of incipient nephritis. He regards the albumen as an evidence of generally lowered resistance, and this would seem to agree with our findings in young adults at Harvard University.

The examination of Harvard freshmen during four previous years showed that five to seven per cent. had albumen in the urine on a single examination.[8] These urine examinations were made at varying times between 10 A.M. and 6 P.M. The nitric acid test was used with unfiltered urine and a definite "ring" only

was considered positive. Doubtful tests were regarded as negative. Sediments were done on all positive urines. During this last college year, 1919-20, 513 freshmen in Harvard University of an average age of 18 were examined. Forty or approximately 8%, showed albumen. The examination of the sediment in all cases, showed nothing more than an occasional cylindroid or a few squamous cells. It was thought that further examination of the 8% showing albuminuria might help to classify these men according to the present standards of postural, orthostatic, transitory, or so-called purely functional types. Of these forty men, six were excluded as having organic heart lesions which might account for their albuminuria. In the second examination some weeks following, sixteen of these thirty-four still persisted in showing albumen. In the third examination two weeks later six of the thirty-four still showed albumen. The sediment of the final six showed nothing with the exception of a few cylindroids in two cases.

This would seem to show that approximately 5% had a transitory albuminuria which we may designate perhaps as functional. This functional group comprises over 80% of the cases of albuminuria without organic disease. Our experience with reëxamination leads us to believe that a rather definite and constant number of young men of eighteen will show albumen in the examination of a single specimen of urine but that with each reëxamination the individuals making up this number will largely vary. Such individuals do not fall into any particular postural group, nor do they have any recognized type of bodily defect. In fact these individuals were physically sound.

The six men who showed albuminuria on repeated examination were found to have albumen only in specimens taken during the day and none in the morning specimens. This observation was constant in further examinations. In the routine physical examinations these six men had been classified according to posture as "D",[7] that is, having very poor standing posture and very poor mechanical use of the body. According to current descriptive terms these men had both postural and orthostatic albuminuria. One hundred and seventy-nine, or 34.8%, of the whole freshman class were classified as "D", but nevertheless it should be noted that only 3% of those who had very bad posture had albuminuria.

Further reference to the physical examination of these six men, however, revealed the following facts: Two had slight varying degrees of hypertension and tachycardia, and therefore had an unstable circulatory condition. In one instance the blood pressure varied from systolic 140 and diastolic 80 to systolic 120 and diastolic 90 with a pulse rate from 72 to 96. Four of the six men had definite spinal curvature and these same four had definitely palpable glands. Five were of what may be designated obviously nervous make-up. They were rather thin, poorly developed individuals, and easily disturbed. The albuminuria in those cases was certainly orthostatic and was furthermore associated with bad posture, but there was a further association in five of the six cases with nervous instability and with a physical condition below par. The question arises as to which of these so-called causes the albumen is due. The impression gathered is that the associated defects, the posture, the appearance of albumen, the orthostatic nature of the albuminuria and the nervous instability are together merely evidences of what might be termed substandard efficiency of the physical machine.

Whether these men or those having the transitory albuminuria mentioned above will be subject to nephritis in later life is difficult to foresee, but the evidence is conspicuously lacking. Some basis for investigating this point was available in some of the older men in the university who had shown albuminuria at a previous examination one to five years before. They were reëxamined and the tendency seemed to be for the albuminuria to disappear except in the cases of those displaying the constant orthostatic type. For example, the urines of six men who had shown albuminuria five years ago were reëxamined. Three showed albumen at this time. Of these only one showed it on the second examination and this was constant in repeated examinations. This albuminuria was of the orthostatic type with no other positive urine findings or positive feature of physical examination. Of the group examined four years ago, fourteen remained who showed albumen on the previous examination. Of this number five showed albumen on reëxamination. These five in turn showed only three with albuminuria in a subsequent examination. Only one of these cases was orthostatic in type, but all three were unstable as to blood pressure, heart rate, and general temperament. Of the

group examined three years previously five men out of eighteen who had showed it before, had albumen on reëxamination. This examination was repeated, but the five still had albumen. Of these five three showed albuminuria on the third examination. One of these men showed albuminuria of the orthostatic type, and the other two nothing beyond consistency in the finding. The general physical examination of all three was otherwise completely negative. Of the group examined two years previous nine men out of twenty-one with a positive test on the original examination showed albumen. Of these nine, two showed it in the second examination. One of these albuminurias was orthostatic in type and the other merely persistent. Both cases were otherwise negative.

This evidence would seem to point to the fact that albumen of the transitory type after a lapse of four or five years has some slight tendency to disappear. Since classification of posture was not done at that time, no effort was made to determine which of these men showing albumen had postural defects. In support of this, it is interesting to note that in each group about half the men with albumen previously, had dwindled to 1/6 or 1/7 who were constant and to 1/3 who were of the transitory type. In other words it is probably justifiable to assume that the other half of the group who could not be reached would show the same findings. Then, out of thirty-five showing albumen originally, only twelve showed the transitory type and five the orthostatic type. The larger number in each case being those with the most recent original examination, more lost their albumen each year, while the constant ones showed tendency to remain, and in numbers nearly the same as the subjects of a similar test for the first time this year. Of the two types of albuminuria, transitory and orthostatic, the latter seems to have a distinct tendency to persist. This was shown by the six men above mentioned, all orthostatic, and by the fact that the orthostatic type persisted in the other groups after a number of years. All these findings both in the group examined this year for the first time and in the older groups, seem to minimize the significance of the transitory type of albuminuria. In no other case were there any of the usual evidences of nephritis besides the albumen.

Albuminuria of course cannot be regarded as a normal finding even if the actual significance is trifling. An attempt was made to observe these cases of albuminuria with a view of determining if possible whether the albuminuria might be regarded as an indicator of physical or mental inefficiency. As stated above, a persistent albuminuria of the orthostatic type is associated with certain defects of posture or of circulatory stability. Yet these defects exist without albuminuria. Pertinent evidence is presented by the fact that the men who were able to make the various freshmen athletic teams showed about the same percentage of albuminuria as the class as a whole, or even a greater percentage. For example, of the total 33 track candidates in the freshman class, about 7½% had albumen, which is not far from the 7% class total. Of this number, 17 made their numerals and of the 17 some 11% showed albumen. None of the larger point winners had albuminuria. Of the hockey team, from a list of 60 candidates, a little over 6% had shown albumen; while of those who made their numerals, some 15% had shown albumen. However, it was worth while noting that of these numeral men, the regulars who constituted the team had no albumen. On the football squad were 76 candidates with 23 receiving numerals. The percentage showed albumen to be about equal in both cases, namely 4%. Only one of the first eleven had albuminuria. Some 27 candidates played basketball, of whom 4% showed any albumen. This investigation would seem to indicate that albuminuria has little or no significance as it appears in the ordinary healthy youth exercising normally, and that the youth with albumen has an equal chance. Furthermore, it seems worth while noting the fact that the albuminurias in these freshmen athletes were of the transitory type. None of them was orthostatic in type. This again seems to lessen the importance of the transitory type of albuminuria. However, the albumen has some slight significance when this ordinary healthy youth is subjected to a moderate strain involved in competition for a class athletic team. He does not do as well as the man without albuminuria. He apparently does himself no harm, but the albuminuria seems like an advance indication of what is later proved true by athletic competition, namely that he is not quite so efficient physically.

Inquiry made as to the academic standing of the men showing albuminuria revealed no

more significant fact than that their marks were good. In fact, of the forty showing albumen only five had marks which would average below "C." This was probably much better than the case of any other forty men picked at random or by means of any similar classification.

It was found on examination of the squads of candidates for university football, hockey, and baseball teams that none of these men had in their previous examination as freshmen showed albumen this year at an examination a few weeks previous to the final competitions in their particular sport. This would seem to be evidence in favor of the appearance of albumen being one of those symptoms of the reduced physical efficiency, spoken of previously. These men on the varsity teams were of course subjected to fiercer competition and greater strain. Few of them showed any other symptoms such as unstable blood pressure, fundamentally defective posture, etc., which we were inclined to consider of equal importance with the appearance of albumen. A man with albumen then would not seem to have quite the physical fitness for severe strain or physical competition that the man without it has. In just the same way, the man with minor physical defects of any other nature would be in the same position. In this particular individual the mechanical use of his body, the instability of his blood pressure or of his nerves, the appearance of any other minor physical defect such as poor use of his body might merely indicate the measure of his physical efficiency. Whether these things, taken together with albumen as an outstanding feature, actually constitute a real measure of a man's physical efficiency is difficult to say.

The question arises as to just how these slight defects such as albuminuria might operate to give us this measure. In theory it seems possible that there may be a certain threshold beyond which men of this type excrete albumen. This threshold obviously is lower for the group under discussion than for the other men, since nearly anyone will excrete albumen after severe exertion, as the literature shows. Just what this threshold is and the cause thereof remains to be found, as well as what features influence it. As mentioned above, the impression produced by the information gathered here is that this threshold is comparable to a fatigue threshold and may be a protective mechanism running parallel with that of fatigue; which prevents such a man from indulging in harmful exertion, exertion harmful to him but not so to the man of more stable physical make-up. In considering the transitory albuminuria it may be that men showing this, are going through a stabilizing process in establishing their threshold. As they grow older their organism becomes stabilized so that eventually they show no albumen under any circumstances, which tends to make us disregard albuminuria of this type.

These men in college represent a definitely circumscribed age group in which a certain number show albumen anyway. Examination of an age group about ten years older shows few with an albuminuria that might be termed functional. Enough individual cases of men in the graduate schools of Harvard University have been studied and followed to warrant the assumption that after the college age these cases of albuminuria show an increasingly greater tendency to disappear except in the orthostatic cases. This would tend to discredit the weight often given by insurance and more particularly army examinations to the appearance of albumen in young men of this age, especially since the greater number appear to be of the transitory type.

In conclusion, it seems only fair to say that a certain amount of evidence points toward postural causes for albuminuria which we are in a position to substantiate somewhat. Also a small amount of evidence would seem to indicate that a certain metabolic or nervous instability is also a predisposing cause. On the other hand, suppose we assume that which seems reasonable, namely, that faulty posture or poor bodily mechanics is simply contemporary with albuminuria in the indication of subnormal physical efficiency and a nervous instability, and is not simply a cause of the albuminuria. On this basis, if the appearance of albumen is merely one of a number of indications, no one of these indications would signify that a man should be barred from ordinary athletics. So far our observations have shown that the athlete with albumen in his urine has only the transitory type. Perhaps, on the basis of the threshold hypothesis suggested above, he is not as efficient physically as the man without albumen. The man with the orthostatic type does not seem to feature as an athlete. Yet there seems to be no very good reason why he should not participate in athletics. Such a man should

of course be watched carefully. From the evidence so far gathered the orthostatic albuminuria would not signify that he will be more subject to nephritis in late years since there seems to be some slight evidence of its tendency to decrease or disappear during the four years of the ordinary college curriculum.

Hence it would seem justifiable to disregard the transitory type of albuminuria except as an index of physical ability during a definite time of life. The orthostatic type, on the other hand, while indicative of no physical deficiency serious enough to bar the individual from athletics, seems worthy of close observation.

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A GENERAL PRACTITIONER'S PRACTICE

By Paul Richmond Withington, M.D., Milton, Mass.

When I was about to graduate from the medical school I tried to find out what sort of a hospital appointment would be of the most value to a man who wished to do a general practice outside of, but easily accessible to, a large city. All of my medical friends advised me to take a medical appointment, all my surgical ones said, "You will find surgery of more value." Of my friends who specialized, each held that his specialty would be of the most use, should I be able to take a supplementary appointment. Obviously the number of appointments that one man can take are limited, and it has occurred to me that perhaps the tabulation of cases actually seen in the first ten months of a practice such as mine might be of assistance to others who, in the future, will have to decide the same question for themselves.

Before giving the table and my conclusions from it, I should like to report in some detail two of the cases which were of special interest.

The first is that of a girl of 18, seen by me on April 19, 1920, during the temporary absence of a colleague. Her family history was negative. P. H.—She has had measles, mumps, pertussis, and influenza. She has also had frequent sore throats which had left her with a "strained heart muscle," and until this year her exercises had been limited. Now, however, she plays baseball and hockey. Last summer she had "renal colic." P. I.—On the afternoon on which I saw her, she had played baseball. At dinner, though not hungry, she had eaten soup, chicken, potato, and squash. Two hours later she vomited, and complained of a persistent, non-radiating pain in her right "hip." Her bowels were always irregular. Ctm. always irreguar, one week early or late—the last, three weeks ago. P. E.—T., 99.4°. P., 88. W. d. and n., restless, pale girl. Heart and lungs entirely negative. Abdomen also negative, save for a slight rigidity and tenderness in R. L. Q.—no true spasm. No costovertebral tenderness. Knee jerks normal. Hip negative. B. P.—120/85. W.B.C. 10,800. Hglb., 70%. Urine—Turbid, pink, alk.; sugar absent; alb., V.S.T. On centrifuging, blood macroscopically in large quantity. Microscopically epithelial and squamous cells. Much blood. Amorphous urates and cystin crystals.

The condition is not common; one authority says but 131 cases are on record. Cystinuria is frequently hereditary (though no history of heredity was obtained in this case), and often causes gravel in the urinary tract.

The second case was that of a cyanotic engineer who was sent by his "boss" to an insurance office where I was, "to see if his heart condition made it safe for him to operate his locomotive." A casual examination of heart and lungs was, to my surprise, entirely negative. I therefore had him go to my office for a fuller physical examination. To my further surprise his blood examination was not abnormal. His Wassermann was negative. I was at a loss, but went over his history again more carefully; it gave me the solution, and shows the advantage of taking full and careful histories. The patient had had frequent attacks of indigestion for which there had been given silver nitrate tablets with relief. Thereafter he had taken them "ad lib."—it is hardly necessary to add that my "cyanosis" (and, I understand I was not the only physician who so considered it) was in reality argyria.

The following cases were seen in a self-respecting community situated 10 miles from the centre of Boston, but beyond the "one-fare zone" of the electric cars,—hence rural in character. I do obstetrics only in an emer-

gency, and I am glad to say that but few emergencies have arisen. Venereal diseases are conspicuous from the fact that, if they occurred, they were not recognized.

SURGICAL. 55 CASES.

Fractures	Colles	2	4
	Olecranon	1	
	Rt. tibia	1	
Sprains	Knee (with synovitis)	2	5
	Ankle	1	
	Finger	2	
Renal calculi—cystinuria			1
Lacerations, contusions, and abrasions (One of severed tendo Achillis)			24
Punctured wounds			4
Foreign bodies	foot 1, hand 1		2
Removal hypertrophied great toe nail			1
Woodchuck bite (hand)			1
Septic	Abscess, left forearm	1	5
	Furunculosis	2	
	Paronychia	1	
	Cervical adenitis (incised) (tuberculosis?)	1	
Foot strain (with bunions, 1)			2
Leg strain			1
Sacro-iliac strain			1
Acute traumatic arthritis great toe			1
P. O. amputation both breasts for cancer (?) Metastases in lung (and myocarditis)			1
P. O. adhesions			1
Umbilical hernia			1
Ruptured varicose vein			1

GYNECOLOGICAL AND OBSTETRICAL. 5 CASES.

Miscarriage	1
Threatened miscarriage	1
Toxemia of pregnancy	1
Pregnancy with gastritis	1
Endometritis (with neurasthenia)	1

MEDICAL. 180 CASES.

I.	*Respiratory tract*		73
	(*a*) Mild infections of unknown etiology (including "influenza")	46	
	Complicated by broncho-pneumonia	2	
	otitis media	2	
	pyelitis	2	
	(*b*) Bronchitis	7	
	with enteritis	1	
	(*c*) Lobar pneumonia	1	
	broncho-pneumonia (reported elsewhere as complicating other diseases)	3	
	(*d*) Pulmonary tuberculosis, active	2	
	with pulmonary hemorrhage	1	
	healed pulmonary tuberculosis	1	
	fibrinous pleurisy	1	
	(*e*) Smoke inhalation	1	
	(*f*) Asthma	1	
	(*g*) Tonsillitis	8	
	given antitoxine	2	
	acute nephritis complicating	1	
	(*h*) Pharyngitis and laryngitis	2	
	(*i*) Sinusitis	1	
	(*j*) Cervical adenitis (not incised)	2	
II.	*Gastro-enteric tract*		15
	(*a*) Gastritis	4	
	(*b*) Gastritis with enteritis	3	
	(*c*) Enteritis	1	
	(*d*) Constipation	5	
	(*e*) Achylia gastrica	1	
	(*f*) Infant feeding	1	
III.	*Cardio-renal system*		14
	(*a*) Acute nephritis	1	
	(*b*) Hypertension	10	
	with chronic nephritis	9	
	Complicated by myocarditis	1	
	angina pectoris	1	
	cerebral hemorrhage	1	
	(*c*) Myocarditis	1	
	(*d*) Functional heart	1	
	(*e*) Cystitis	1	
IV.	*Contagious diseases*		15
	(*a*) Diphtheria	1	
	(*b*) Measles	13	
	with otitis media	1	
	pyelitis and otitis media	1	
	broncho-pneumonia	1	
	(*c*) Mumps	1	
V.	*Eye*		13
	(*a*) Conjunctivitis	12	
	(*b*) Burn of conjunctiva	1	
VI.	*Skin*		7
	(*a*) Urticaria	2	
	(*b*) Pityriasis rosea	1	
	(*c*) Epidermis phyloninguinalis	2	
	(*d*) Poison ivy	2	
VII.	*Ear*		7
	(*a*) Otitis media	3	
	reported above as complicating other illnesses	4	
VIII.	*Nerve*		5
	(*a*) Epilepsy (?)	1	
	(*b*) Dementia praecox	1	
	(*c*) Neurasthenia	2	
	(*d*) Traumatic psychosis (with hypertension and myocarditis)	1	
IX.	*Miscellaneous*		31
	(*a*) Enuresis	2	
	(*b*) Argyria	1	
	(*c*) Undiagnosed	8	
	(*d*) No disease	4	
	(*e*) Measles suspect	2	
	(*f*) Malnutrition	2	
	(*g*) Debility	1	
	(*h*) Routine examination	4	
	routine urinalysis	2	
	(*i*) Acute rheumatic torticollis	1	
	(*j*) Myalgia	1	
	(*k*) Chronic arthritis	4	
	(*l*) Acute infectious arthritis	1	
TOTAL			180

Ninety-one of the above cases were seen at a boys' school, of which I have been appointed physician. All were under 18 years of age. Of the remaining, 80 were over 18 years, 49 were under 18.

I conclude from my experience, as illustrated by this table, that anyone undertaking a "near urban" type of country practice would do well to take a surgical hospital appointment, if possible, supplementing it with a Children's Medi-

cal; that while taking the latter he would do well to perfect his technique in the performance of his paracenteses. If unable to take more than one appointment, I would like to remind him that it is not necessary to be a resident interne to pick up additional knowledge in the various branches of medicine—out-patient departments give similar opportunities for less fortunately placed young men, and are anxious to procure their services.

Clinical Department.

AN UNUSUAL NEPHRITIS.

By F. Van Nüys, M.D., Weston, Mass.

Mrs. A. C., aged 22, entered the Waltham Hospital July 18, 1919, remaining there 43 days. She reëntered May 29, 1920, and died June 30, 1920. She was under close observation for nearly a year.

Her family history is negative except that her brother recently shows albumen in the urine after suffering for months from "indigestion." No diseases in childhood except measles. Excellent health, but for occasional sore throats, up to childbirth four years ago. No miscarriage.

Present Illness: Since her child was born, she had fair health up to the summer of 1918. Then, without ascertainable cause, she gradually developed nephritic symptoms—pallor, headaches, oedema of hands and feet, occasional nausea and vomiting, dizziness, dyspnea on exertion, and failing eyesight up to almost complete blindness. For the last six months she had suffered from paresis and partial anaesthesia of the left arm and leg. In June and July of 1919 she seemed close to death. She entered the hospital with orthopnea, anasarca, pernicious vomiting, semi-coma, partial paralysis of left half of body, and nearly complete blindness; in short, impending uremia.

Physical Examination: A small, pale, emaciated though bloated woman. Throat, tongue, and ears are negative. Teeth decayed. Skin pale. Pupils equal and react normally. Knee-jerks lively. Left ankle clonus. Lungs negative, save for moist râles at bases. Heart 19 cm. wide on percussion; action regular and rapid; sounds forcible; a blowing systolic murmur at apex transmitted to axilla; aortic second increased. Blood pressure 220/120 (this later fell and kept about 180/115). Abdomen full and soft; no masses, tenderness, or spasm; spleen not palpable; liver sixth rib to costal margin. Eye grounds showed choroido-retinitis so marked that little normal retina could be found. She could make out the form of anyone standing beside her bed.

Urine: The 24-hour quantity varied from 250 to 1500 c.c., usually about 800 c.c. Sp. gravity 1002 to 1010. Reaction acid. Sugar absent. Albumen always a heavy trace (8%). Microscopically a rather heavy sediment. Many granular, hyaline, and cellular casts. A few waxy casts. Many red blood cells, mostly shadow forms. Little fat seen. Later on in the disease the casts came in showers.

Treatment: For almost a month usual methods of treatment were tried with very little benefit. She remained in about the same condition. She was put on absolute rest, low protein (40 to 50 gm. protein daily), and as high fat and carbohydrate diet as possible. The calorie tables showed that she received insufficient food because of anorexia and uncontrollable vomiting. I believe that free daily movements of the bowels, and sweating when her strength permitted, enabled her to live through the first month in the hospital.

Caffein, diuretin, digitalis, nitroglycerin, and thyroid extract were tried at one time or another with no appreciable effect.

Finally Fischer's treatment was begun on August 16, 1919, with immediate and remarkable benefit. She received his hypertonic salt solution (sod. chloride 14 gm., sod. carbonate 10 gm., and water 1000 c.c.) daily by the Murphy drip in the rectum, and alkalies and sodium chloride freely by mouth. In the next ten days her uremic symptoms disappeared. The anasarca lessened gradually. The 24-hour quantity of urine rose to 1500 c.c. and above. The headache, vomiting and stupor cleared away. The blood pressure fell to 185/115 and remained thereabouts for many months. Appetite and digestion returned. She could sleep on one pillow and her previous dyspnea was wholly relieved. Eyesight improved so that she could read the headlines of a "yellow" newspaper, although the eyegrounds looked as bad as before.

Fischer's treatment gave so much discomfort that in two weeks the patient chose to discontinue it wholly and return home in an invalid but comfortable condition. At home she was put on the low protein diet.

Laboratory Findings: For the first few weeks little work was done in kidney or other tests because death was expected daily.

Blood: Hemoglobin 35%. Red cells 2,840,000. White cells 9000 per cubic mm. The smear was typical of secondary anaemia No blasts. No stippling. Feces negative to guaiac test.

Wassermann tests of both blood and spinal fluid were negative.

A number of modified Schlayer tests were done, all with about the same result. The following (Diagram 1) was taken after the Fischer treatment had improved her condition enough to allow her to take sufficient food and liquid to make the test worth while.

DIAGRAM I.

Time of Day	c. c. Urine	Sp. G. Urine
6 to 8	110	1010
8 to 10	290	1008
10 to 12	240	1004
12 to 2	300	1004
2 to 4	250	1004
4 to 6	110	1002
6 P.M. to 6 A.M.	1000	1008
Total, Day	1300	
Total, 24 hours	2300	

Intake of fluid 2000
Intake of NaCl was 9 gm. The output was 5 gm.
Output of total solids, 35.8 gm.

Impression: Hedinger's and Schlayer's diet, used in the above test, puts a heavy load of elimination upon the diseased kidneys. In this case the water elimination was excellent—a vast improvement in function over that prior to the Fischer treatment. The fact of the output being greater than the intake was probably due to the disappearing anasarca, because subsequent similar tests failed to give this feature. The function of water elimination remained elastic all that fall and winter.

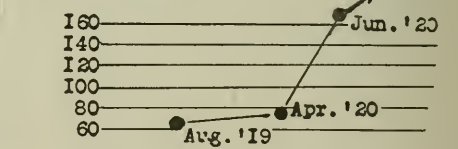
On the other hand, the kidneys' ability to concentrate urine is manifest, and confirmed by five subsequent tests. Apparently the kidneys showed the height of this ability in the early forenoon, a low steady performance from 10 to 4, and almost nothing from 4 to 6—namely, a function which fails as the day progresses.

In theory the subnormal output of total solids, the constantly low specific gravity, the incomplete elimination of NaCl, combine to make a diagnosis of tubular rather than one of vascular hyposthenuria. Here, however, the later post-mortem findings prove that the hyposthenuria was not wholly one or the other, but both combined.

The phenolsulphonephthalein test was given during the year six times in all. Not once did a trace of the dye appear in the urine at the end of two, or of 24, hours. It may be that this patient's body destroyed the dye with peculiar rapidity and completeness, and that, if her body destruction had been 20% to 40% of the dye, as in the average person, she might have eliminated some of it in her urine. If, as has been said, the red test is a reliable index of kidney elimination we should expect the speedy death of the patient. This case, however, illustrates the fact that the kidney may eliminate one substance with difficulty (salt), another easily (water), and a third not at all (red dye). Prognosis cannot be based on one functional test.

The blood nitrogen and sugar determinations were made by Dr. F. L. Burnett of Boston. The blood was taken after a six-hour fast. The protein intake at no time exceeded 55 gm. in the 24 hours.

NON-PROTEIN NITROGEN OF THE BLOOD.



(Normal—20 to 30 mgm. per 100 c.c. blood.)

The first N-PN. was taken while, under Fischer's treatment, her uremic symptoms were fast disappearing. During the winter at home she led a semi-invalid life with periods of comparatively little sickness. Twice she was able to go sled riding. In February she had a slight attack of influenza, after which her uremic symptoms gradually reappeared. The last N-PN. reading foretold her approaching death.

BLOOD SUGAR.

July, 1919 ..... .22%
April, 1920 ..... .12%
June, 1920 ..... .07%
(Normal blood sugar, 0.7% to 0.11%)

The high blood sugar was discovered by accident. The cause is unknown beyond the fact

that the blood of chronic nephritics sometimes shows a higher sugar content than normal. The lower contents in April and June are due probably to partial starvation in the terminal stage of her disease.

The patient had become so accustomed to her chronic uremic poisoning that it seemed she might live indefinitely. Finally, however, she developed a right-sided purulent pleurisy and died having the same symptoms with which she had entered the hospital nearly a year before.

Permission for a partial autopsy was obtained. The kidneys were small, firm, pale, with adherent capsules. Weight, 126 gm. The report of the pathologist, Dr. F. L. Burnett, is given.

"In sections of the kidneys almost one-half of the tissue is composed of fibrous cells. Fully one-half of the glomeruli are obliterated, and are evident only by a contracted mass of fibrous material which often presents hyaline degeneration. Many of the convoluted tubules, too, are obliterated, and those that remain show a hydropic degeneration. The descending and ascending loops of Henle are also obliterated; although more of these are apparent than any other parts of the tubule. Numerous hyaline and timely granular casts are apparent also. The capsule of the kidney is moderately thickened and the arteries which sometimes present a slightly thickened media are in general not abnormal. The tissue does not contain a great deal of fat. Scattered generally through the tissues are numerous areas made up of lymphocytes, but they are irregular in shape and areas of necrosis are not apparent within them."

The patient's clinical history might be explained from this picture of the kidney tissue. Apparently many glomeruli were destroyed and others spared. Those tubules which escaped destruction were badly crippled. The tubules on the whole suffered more than the glomeruli. The patient for a good while had a barely sufficient kidney parenchyma which gradually was choked out by the increase and spread of fibrous and scar tissue.

NON-TUBERCULOUS COMPLICATIONS OF PULMONARY TUBERCULOSIS.

By Herbert F. Gammons, M.D., Dallas, Texas.

The differential diagnosis between pulmonary tuberculosis and other conditions simulating this disease in its local reflex and toxic symptoms will be in all probability, a problem for years to come.

The problem is made more difficult when we realize that many tuberculous suspects have in addition to an active or healed tuberculous focus an active focus of infection due to other organisms than the tubercle bacillus either in the lungs or in some other organ. However, in patients with sputum containing bacilli there are found one, two or more conditions which cause symptoms that are blamed on the tuberculous condition and which influence the prognosis and treatment greatly if discovered and remedied.

It is unfortunate that so many physicians after finding a positive sputum or physical signs in the chest, stop making further examination of the patient and feel that all symptoms such as temperature, chills, etc., are due to the tuberculosis. The natural course of a tuberculous infection is toward improvement, and in any given case of apparent good resistance, with a continuation of symptoms after proper rest and hygienic treatment for the tuberculous condition has been in effect, some other focus of infection should be sought out and treated.

This does not mean that reckless removal of tonsils and teeth is advocated in patients with lowered resistance. The probable improvement must be weighed against the probable reaction following operations. Nature, however, is burdened with infections and conditions, especially mental, in addition to the tuberculosis, which can often be remedied, which in many cases have prevented an arrest of the disease.

Many times a post-mortem examination has shown there may be superimposed infection in the lungs, the tuberculous infection while discharging a few bacilli being the slightest in extent and the influenzal or pneumonic condition being of greater extent and severity. Often the body tissues need building up, especially the blood, and occasionally, I have seen patients in whom a marked shortness of breath was apparently due to deficient oxygen-carrying properties of the blood and cleared up under hypodermic iron injection. It has been the habit with many physicians once a diagnosis has been made of pulmonary tuberculosis not to look further into the case, but to blame any and all symptoms on tuberculosis, and in some instances this attitude has been the cause of deaths on account

of the lowering of resistance, due to invasion of other organisms.

The improvement in patients' mental attitude following clearing up of other infections is wonderful at times, and this improved mental attitude increases resistance to tuberculous infection.

The following cases show what results can be accompliished in some instances. It is true that oftentimes tuberculous patients have tonsils removed and teeth extracted and still continue to exhibit the symptoms that were noticed before such operation. This fact, however, should not deter us from doing everything possible that promises help for any and every patient suffering with tuberculosis.

CASE 1. V. W. Advanced tuberculosis, slight fibroid condition at right top, left entirely infected with cavation in upper third. Pneumothorax had been administered with good results and a compression of lung resulted as shown by x-ray. Patient, however, continued to run slight fever and had frequent attacks of tonsillitis. Tonsils were removed and the operation was followed by a drop in temperature. Temperature has remained normal since tonsils with pus pockets were removed.

CASE 2. W. H. Scattered râles in both lungs. Slight cough, no expectoration. Fever persistant and also pains in different parts of the body. This patient had taken treatment for a long time without any decrease in temperature. X-ray examination of teeth showed abscessed tooth which was removed, and following this temperature has been normal.

CASE 3. F. L. Moderately advanced case of tuberculosis has had chronic appendicitis, symptoms of toxaemia and irregular temperature. Appendix was removed which was ulcerated and this was followed by drop in temperature to normal.

CASE 4. F. B. Advanced case of tuberculosis with marked shortness of breath. Blood examination showed a very low haemoglobin content. Hypodermic iron was administered and after a few doses breathing became normal.

CASE 5. Mrs. W. Scattered inflammatory conditions in both apices. Fever irregular and higher every third day. Blood examination showed malarial parasite and following eight weeks of quinine treatment, patient is running normal temperature and has gained in every way.

The above cases show that we must not stop when we have made a diagnosis of tuberculosis but we must find out also if there are any complications and, if so, overcome them.

DURATION OF PREGNANCY.

BY HILBERT F. DAY, M.D., F.A.C.S., BOSTON.

DURING the last few years of caring for obstetrical cases, I have been somewhat troubled at figuring the probable date of delivery and it has been borne in on me that certain women were more apt to run over the customary ten lunar months than others.

With this in view, I have made a study of my last 25 private patients who were allowed to enter labor normally, taking into account particularly the interval which occurred between their menstrual periods. Of the 25 patients, 4 had an interval less than 28 days, and 8 an interval longer than 28 days, varying from 29 to 33 days and in one case 35. There were 13 cases with an interval of 28 days. The actual duration of pregnancy from the beginning of menstruation to the day of delivery has been figured out in all of these cases and the groups averaged with the following interesting observation:

No. of Cases	Interval in Days	Actual Duration of Pregnancy in Days
4	less than 28	277
13	28	283
8	more than 28	295

The above noted findings are deduced from too few cases to draw any definite conclusions, but I wish to submit it as a suggestion for further study. The occurrence of longer pregnancies in women who have a longer than normal interval has induced me to choose for them as a probable date for confinement a later day than I would give to a woman who has a 28-day interval.

APPOINTMENT OF DR. CHARLES M. CAMPBELL. —Dr. Charles Macfie Campbell has been appointed professor of psychiatry at the Harvard Medical School. Dr. Campbell is a graduate of the University of Edinburgh, class of 1897, where he received his medical degree in 1901. He has been associated with the Psychiatric Institute of New York, 1908 to 1911, with the Cornell Medical School, and with the Bloomingdale Hospital. Since 1913, Dr. Campbell has been serving as associate professor of psychiatry at Johns Hopkins and associate psychiatrist at the hospital.

THE BOSTON
Medical and Surgical Journal

Established in 1812

An independently owned Journal of Medicine and Surgery, published weekly under the direction of the Editors and an Advisory Committee, by the Boston Medical and Surgical Journal Society, Inc.

THURSDAY, DECEMBER 9, 1920

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An editor will be in the editorial office daily, except Sunday, from twelve to one p.m.

Papers for publication, and all other communications for the Editorial Department, should be addressed to the Editor, 126 Massachusetts Ave., Boston 17. Notices and other material for the editorial pages must be received not later than noon on the Saturday preceding the date of publication. Orders for reprints must be returned in writing to the printer with the galley proof of papers. The Journal will furnish free to the author, upon his written request, one hundred eight-page reprints, without covers, or the equivalent in pages in the case of articles of greater length.

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BOSTON MEDICAL AND SURGICAL JOURNAL

126 Massachusetts Ave., Cor. Boylston St., Boston 17, Massachusetts

FADS AND FALLACIES OF FASHION.

AMONG the numerous fads and fallacies which have become prevalent with the progress of civilization, there are several, to the folly of which some persons, particularly members of the medical profession, have become awakened. It is to be lamented that however assiduously these few apostles of health and rationality may endeavor to convert their obstinate and unenlightened fellows to a normal way of thinking and living, the majority of human beings, nevertheless, continue complacent and unheeding in their slavish ways. Consider for the moment the tyranny of mode and fashion—how it dominates our minds, our bodies, and our purses. To what heights of intellectual and artistic achievement might the human race aspire if the time and energy at present expended upon such unessential and injurious articles as modern headgear and expensive shirt-fronts were devoted to the higher arts! In what blissful comfort might move the servitors of stiff collars and fantastic heels! And yet, the medical profession, privileged as it is to guide the intimate affairs and habits of men, stands by and impotently allows the human race to bring upon itself all manner of discomfiture and disease caused by the foibles of human intellect.

Would one be bald, if it could be prevented? Would one, on the pretense of keeping warm that part of the human body which Heaven has endowed most generously with means of natural protection, bring upon one's self the inconvenience, expense, and the baldness which are the price of indulging in the pastime of hat-wearing? None can gainsay the irony of the fact that while a man is presumably keeping his head warm by wearing a hat, he is steadily and surely denuding his scalp of its most becoming and efficient covering. Yet how difficult it is even to persuade men that hat-wearing is the chief cause of baldness, that in pressing the scalp between the helpless cranium and the inexorable hat he is wilfully perpetrating the strangulation of the blood-vessels of his scalp and diminishing the blood supply to the crown, thereby leading to inevitable atrophy of the region so maltreated.

Scarcely less ridiculous and injurious than the above-mentioned and time-cherished article is the stiff-fronted shirt and the stiff collar worn by the easy victim of fashion's decree. They are no more sensible, no more innately elegant, and infinitely less comfortable than are the softer, more pliant and flexible variety. In cases where there is to be considered freedom of movement in relaxation to disease, as in serious heart and lung troubles, physicians should stringently prohibit the unnecessary hindrance to the respiratory movements caused by the armor-plate shirt-front. Perhaps the speculative psychologist can explain why man entails the unjustifiable labor, expense, and discomfort involved in displaying the small white patch of that article of dress which makes so pathetic and painful an object of the stout emphysematous man laboring with the sportive tendencies of his stiff-bosomed shirt and the sharp-edged bulwark which protects his plethoric neck from the baneful view of his companions.

It is a curious whim—that men should conjointly expend thousands of dollars annually in the up-keep of the tyranny of fashion. Yet, is man alone to be condemned for indulging his insatiable desire to gratify unreasoning custom?

What can be said for the corset worn by the majority of the women of today, and of the delicate instruments of torture designed to deform and cripple the feet which were meant to be useful means of support rather than objects of whimsical regard and fretful solicitude? It is strange that with the eternally perfect models of Greek beauty for her emulation, woman should seek constantly the "newest spring" and the "most advanced autumn" styles in figure and footgear. The most utterly pernicious and thoroughly to be condemned example of modern bondage is the corset as it is made by the average manufacturer and adapted to the majority of women of today. Countless feminine ills and diseases are due to the constant downward pressure exerted upon the mobile pelvic and abdominal organs. Yet women will continue to wear improper corsets and ridiculous, unbeautiful, and unhygienic shoes until a physician is consulted for their attending ailments and they are forced to adopt more rational, if less fashionable, apparel. A great responsibility, therefore, devolves upon the medical profession—not only in correcting diseases already incurred as a result of obedience to the demands of fashion, but also in consequently freeing the intellect and the imagination of the human race for the cultivation of more worthy pursuits.

MEDICAL NOTES.

ALL-AMERICA CONFERENCE ON VENEREAL DISEASES.—The All-America Conference on Venereal Diseases, which will be held in Washington, D. C., from December 6 to 11, 1920, under the auspices of the United States Interdepartmental Social Hygiene Board, the United States Public Health Service, the American Red Cross, and the American Social Hygiene Association, is the first of a series of regional conferences suggested by the International Health Conference held at Cannes under the auspices of the League of Red Cross Societies. In an announcement of the preliminary program, it has been stated that the purpose of the administrative committee is to bring together recognized authorities in their respective fields and especially to make possible a comparison and evaluation of the methods now being employed in various parts of the world for the control of venereal diseases. As far as possible the presentation of set papers will be avoided, it being felt that full and free discussion will be far more helpful to those who attend.

The program will be so arranged that it will be possible for any delegate to attend all the meetings. In general, the morning will be devoted to a discussion by the Conference delegates of the scientific basis underlying the campaign for the control of venereal diseases, the afternoon to a discussion by the delegates of administrative methods, while the evening will be given over to general meetings where the various findings of the Conference delegates will be presented for consideration by the entire membership of the Conference.

The Conference will be preceded by special addresses on topics allied to venereal disease control, in some of the churches of Washington on Sunday evening, December 5.

At the general session of the Conference to be held Monday evening, December 6, addresses will be made by the president of the Conference and by other speakers who will deal with the broader outlines of the subject. Among the subjects to be discussed by the delegates during the Conference are the following: present status and recent progress in medical investigation, education as a means of controlling venereal diseases, law enforcement and protective social measures with individuals, social influences in the control of venereal diseases, administrative measures in the United States, Canada, Latin-American countries, and other countries and the relation of official to extra-governmental agencies, the toll of the Great Red Plague, and juvenile delinquency and public health.

The Conference Delegates will review past experiences and existing knowledge relating to the causes, carriers, treatment and prevention of venereal diseases, and will endeavor to adopt recommendations relating to a practicable three-year program for each of the North and South American countries participating, and to suggest plans for putting such a program into effect.

DANGER IN HORSE-HAIR SHAVING BRUSHES.—Surgeon-General Cumming, of the United States Public Health Service, has just issued a fresh warning against the use of horse-hair shaving brushes, to which not a few cases of anthrax have been traced.

He says: "The Public Health Service has

made every effort possible under existing laws and regulations to prevent the occurrence of anthrax due to infected shaving brushes; but in spite of its efforts anthrax cases occur and will continue to occur unless the public ceases to buy and use horse-hair brushes for shaving.

"It is the consensus of expert opinion that shaving-brush anthrax is contracted only when the shaving brush is made of horse-hair; and Congress at the next session will be asked to prohibit the use of horse-hair for that purpose. It is doubtful, however, if any effective measures can be taken by health officials to curtail the use of horse-hair shaving brushes now in trade channels, some of which are presumably infected, except by a direct warning to the public not to buy or use such brushes."

Dr. Cumming strongly urges the issue of such an appeal by state health officials and its widest possible publicity, as the only way, pending additional legislation, to obviate their potential danger.

BOSTON AND MASSACHUSETTS.

Plans of the Massachusetts Department of Public Health for Plague Prevention.—Dr. Eugene R. Kelley, commissioner of public health, has requested $25,000 from the Governor and Council that plague prevention measures may be inaugurated in the seaport cities and towns of Massachusetts. This work will be done in conjunction with other New England states having seaport communities.

At a recent conference held at the State House of the Commissioners of Health of Connecticut, Rhode Island, New Hampshire, Maine and Massachusetts a request was made that an officer of the United State Public Health Service might be detailed as an adviser in this work in each of the states represented. P. A. Surgeon L. L. Williams, Jr., has been detailed for this work.

It is planned to conduct a rodent survey in each seaport community. The Harvard Medical School, through Dr. Milton J. Rosenau, Professor of Preventive Medicine, has offered space for the laboratory examination of the rats. The personnel for this survey consists of a consulting director, bacteriologists, an expert rat trapper with six assistants, dieners, and laboratory and clerical assistants.

Strenuous efforts are being made to interest local authorities in enacting building regulations which will secure rat-proofing of new and old constructions. In the event that plague-infected rats are found, intensive trapping and rat-proofing will be undertaken.

As the infection is found in the rat some months before it appears in the human family, the wisdom of this survey is apparent.

The Vincent Memorial Hospital.—The following appeal has been issued in behalf of the Vincent Memorial Hospital:

Owing to the increased cost of operation, particularly of wages and supplies, the Trustees and Managers of the Vincent Memorial Hospital are faced with this alternative: either to obtain additional funds through the generosity of the public or to close their doors to the working women, to whom the Hospital has ministered for so many years, and this at the very time when physicians report the demand for hospital beds by people of moderate means as most acute.

The hospital was founded in 1890 by a small bequest from Miss Caroline Staples as a memorial to Mrs. J. R. Vincent, a well-known and benevolent member of the Boston Museum Theatrical Company. From its limited facilities on Chambers street, it has grown to the present efficient organization on South Huntington avenue.

Among the factors which have contributed to its success is the Vincent Club, founded in 1892 for the purpose of raising money for the hospital. The Club supports eight beds in the ward bearing its name, which is about one-third the capacity of the institution. The hospital has somewhat suffered from the prevailing supposition that the Vincent Club bears the chief part of the hospital's support, for it will be seen that two-thirds the operating cost must be met from other sources.

The hospital building on South Huntington avenue occupies an ample lot of land, selected for its command of fresh air and sunshine as well as the fine outlook over the Parkway. This building necessitated the placing of a mortgage upon the property, now standing at $10,000. the whole or part of which, it is hoped, some friends will be moved to donate, for it is obvious that the interest payment of this sum depletes the funds otherwise available for the running expenses of the hospital.

The hospital is conducted on a strictly non-sectarian basis, and extends a cordial welcome to the limit of its capacity. The managers and

trustees earnestly ask for assistance in the form of annual subscriptions, or of donations of $5.00, or of as much larger amounts as possible.

The Massachusetts Medical Society.

MATERNITY AID.

THE physicians of Worcester North District, through A. H. Quessy, M.D., present the following brief to the Senate Ways and Means Committee:

Mr. President and Members of the Committee:

You have listened to the proponents of the Maternity Aid bills, and have heard them speak of the machinery they wish to create to give prenatal and postnatal care. You have been told with what paternal care the State Department of Health is willing to take it under its wing. Some have told you that it would cost the State the ridiculous amount of two hundred thousand dollars; others have admitted it would more probably cost at least two millions. The most important wheels of all this proposed new machinery are the physicians of this Commonwealth, the men upon whom you must depend, otherwise these bills would be useless. What do the physicians of this Commonwealth think about these bills? Have they been consulted? No. It is safe to say that not 50 per cent. of the physicians have an intelligent knowledge of these bills, and the reason is obvious because these bills have not generally been put before them for consideration. I have been delegated by the physicians of the Worcester North Medical District, and the physicians of the Fitchburg Medical Society, to appear before you and tell you what they think of these bills. I have been instructed to voice their unanimous opposition.

It seems necessary at this time to correct a wrong impression which may have had some weight before the Joint Committee at previous hearings, when it was said that the Massachusetts Medical Society and its 3800 physicians were in favor of these bills. This is not so. The Legislative Committee of the Massachusetts Medical Society, we are told, endorsed these bills, but they did so without referring the question to the different districts. The Worcester North District, after careful study, opposes these bills; so does the Bristol South District, and the Franklin District, and I have no doubt other districts would also oppose them. Therefore, when a speaker before the Joint Committee said he represented the 3800 physicians, members of the Massachusetts Medical Society, all in favor of the bills, that statement could not have been correct.

We ask, from what source or sources comes the demand for Maternity Aid? Are the physicians asking for it? No. To properly administer prenatal and postnatal care under State control it would be necessary to establish a department and sub-departments with high salaried officers and sub-officers, and we can understand why some specializing in obstetrics might favor these bills. We also believe it would be more fitting for the State Department of Health to be in a receptive mood rather than advocate these bills before the legislative committees. Is the demand for maternity aid statewide? No. Is organized capital demanding it? No. Are organized and non-organized labor voicing the expression of the rank and file for it? A few; not many. Is it the women with the large families, the real producers who seek it; or rather, is it the childless or the unmarried women who, instead of reproducing, feel that they must devote all of their time and energy to their poor unfortunate sisters who are doing their bit to increase the population of American citizens? These bills come from an erroneous idea in the mind of some people, based upon questionable statistics, that the health of the American nation had gone far below the universal standard, and that prenatal and postnatal care is the sole panacea for all our evils. We are sick and tired of social reforms which are constantly being foisted on us to cure us of what ails us, when nothing at all out of the ordinary is the matter with us.

We are told that it is a health measure; that this legislation, if passed, will reduce defective population, lessen need for state care of the insane, the half-witted, the indigent, the tubercular, the blind, the alcoholic, the criminal, the drug-ridden, and all the others of the fifty-seven varieties. What a dream! We were made right, but we have not kept ourselves right. Generations and generations of wrong living, bad habits, and what not have brought upon us the above conditions. Women and men as well have degenerated from the high standard of physical perfection which God gave us when he first made man. Why place the blame upon the few months that precede or follow our birth? Do the proponents of these bills propose to undo, by prenatal and postnatal care, what have been brought upon us by years and years of wrong living? It is well to seek remedies for the above evils, but it is ridiculous to say that prenatal and postnatal care is the cure. If the proponents of these bills are really in earnest in their endeavors to better the human race, the expectant mother and the offspring, I would suggest that they devote the same amount of energy in advicating more religion, better morals, better habits, better protection, by right dressing, better living and working conditions, less dancing, less theatres, more fresh air, less burning of the midnight oil, and many other things too numerous to mention. The results obtained would fade into insignificance the prenatal and postnatal proposition.

These bills are not wholly health measures. Germany had such laws, and to what did they lead? Germany adopted, years ago, those and other such laws, that she might produce a superman. Did she produce one? America has never had such laws. Was the American fighter inferior to the German soldier? The health and physical condition of the American people can well compare with that of any other nation; there are defects in all of them. Australia has prenatal and postnatal care and it is admittedly a failure. Germany with her prenatal and postnatal laws, and all her other social laws, did not produce a superman; she did produce a machine man, a man, State controlled; the State looked after the pedigree of his birth, controlled his education, regulated his habits, suggested his thoughts, etc., but he had no individuality. His health was not superior. While the German machine was winning, the German superman was at his best; when the machine began to lose, the superman went to pieces. Having no individuality of his own, he had cultivated no thoughts of his own; his courage was gone; he had no initiative of his own. The superman has proved himself to be the inferior man. These measures are essentially socialistic in tendency, as they are in Germany, and we don't want Socialism parading in this Commonwealth under the guise of health measures.

These bills are coming up at a very inopportune time; a feeling of unrest and dissatisfaction exists in our land. Our Government was founded upon true Democracy, guaranteeing to every man his rights and privileges. We have grown to be a great nation, our institutions have flourished, industry has prospered, labor conditions and wages are the best in the world. America has been a Heaven to the emigrant; our social and economic conditions have been inviting to all. And yet, some people are dissatisfied. And is it surprising when some faddists and social reformers suddenly discover that everything is wrong and must be reformed? Our system of education is said to be wrong and must be reformed and State-controlled. Our habits and appetites seem to have been in need of State and National control, etc.; we have not even been born right in the past, and in the future, the State must see to it that the child receives a better and more scientific birth. Probably, also, the necessity for birth control by the State may develop in the fertile mind of some reformer. Our great Democracy is slowly giving way to Autocracy; individual rights are slowly but surely being sacrificed by such pieces of legislation and similar law, and we are plunging head first into Autocracy or State control. The State is not supreme; the individual is supreme; that is true Democracy. The individual existed before the State. The Pilgrim Fathers came here to enjoy rights and privileges which Autocracy denied them across the sea. They established a form of government—Democracy—to guarantee the rights and privileges they sought; thus the State was created for the individual. We have been living under this same form of government happily and contentedly.

Recently our country went to war; our soldier boys faced death that Autocracy should perish and Democracy should endure. Was the war we fought an unjust one? Can it be that we were wrong in fighting for Democracy in the face of so many late attempts to introduce Autocracy? Control by the individual is Democracy; control by the state is Autocracy, or, in other words, Socialism. These bills lead to control by the State, or Socialism; Socialism leads to Bolshevism; Bolshevism leads to Anarchy. We therefore oppose them because they lead the way to Socialism and because they are radically wrong.

Physicians have been told that such legislation must go through and that it were better to steer it than oppose it. The physicians of Worcester North District believe that the senators and representatives of the State of Massachusetts are willing to listen to an honest expression of opinion from the individuals who will be most affected by these bills. We don't want to steer them, even to have them amended. We oppose them *in toto* because they are radically and wholly wrong and cannot be partially right.

We oppose them because they are a step towards State control of the practice of medicine. They are a cat in a bag. You are asked to pass these bills which are not at all specific. The proponents cannot tell you how much it will cost to administer these laws, they cannot point to good results obtained in any country, they cannot specify in what way they propose to employ physicians, nor what remuneration they intend to give them for their services. They cannot specify in what adequate way they intend to give nursing and expert prenatal care, or nursing and hospital care at the time of confinement; yet, all these things are called for but not specified in the bills. They tell you the modified bill does not propose to give pay for medical services, and yet in Section 4 of Senate bill No. 506 we read: "The recipient of maternity care under this act, if remaining at home, shall be allowed in all cases to choose her own physician, subject to said physician's acceptance of the fee schedule for such cases, and other rules and regulations of the said department governing this act." By what authority, then, shall the State allow a woman to choose her own physician if the State is not paying for it? The interpretation of Section 4 leads us to believe that the State does intend to pay the physician, to allow the woman to choose her own physician, and that the physician must first accept the fee schedule, and all the rules and regulations which it is proposed to establish. Is not this controlling the practice of obstetrics? These rules and regulations are to be made at some future time by

the State Department of Health, whose duty it shall be to thus control the practice of obstetrics. We therefore oppose these bills, because they are an entering wedge to State control of the practice of medicine.

We oppose them because they cast reflection upon the competency of the medical profession. The State Board of Registration in Medicine has passed upon the qualifications of every physician in this State, and has issued certificates and permits to practise medicine, obstetrics included; that ought to be sufficient. The bills establish another Board of Registration in the Department of Health. If there is anything wrong in the present system and arrangement of things, let the Board of Registration in Medicine see to it; that's what it was created for. Each department has enough of its own business to attend to without trespassing upon the duties of others. The place for a physician to train and qualify is in a medical school, not in the State Department of Health.

We oppose these bills because they are unnecessary. We have, at present, laws on our statute books. What is needed is to work out these laws to their fullest extent, then if they are not sufficient, amend them or make new ones. The State Department of Health has never been given more than advisory power; we have no objection to have that same power continued. The force of law has always been invested in the local departments of health; that is home rule, and we trust that it shall prevail. The very things sought for are now in a measure being accomplished. Physicians, under the law, report all births as they occur; the local Board of Health then sends a visiting nurse or the district nurse to follow up the case and help the physician to give postnatal care. This costs the State not one penny. It would be an easy matter to extend the work and make it even more effective under the same mode of procedure. Expectant mothers engage their physicians several months in advance; the attending physician is thereby in a position to give advice and prenatal care, examine urines, prevent complications, such as eclampsia, etc. Here again it would be an easy matter for the physician, in conjunction with the local board of health and the visiting nurse, to extend the work: the advisory function of the State Department of Health would find a very useful and broad field of endeavors. Thus we oppose these bills because they are unnecessary and because the same results can be obtained without cost to the Commonwealth.

We oppose them because of the enormous financial burden upon the taxpayers of this Commonwealth; the price would be astounding and prohibitive. Just think of it, a very conservative amount for prenatal and postnatal care would be at least two million dollars, and that alone is the cost price of the newly born. After the State has bought and paid for the child, we suppose, if the State is consistent, it would then be found necessary to give it an education and physical training under State control at a few million more. When the child is grown to adult life, the State again must consistently finance the control of its health and working efficiency, and when old age has brought to an end his useful career, an old-age pension would be the next thing on the program; add several millions more. Death would come as a fitting climax, and the least that could be done would be to give him a decent burial. All told, it's a simple problem of mathematics; if it costs two million for the birth of the State's children, how much would it cost by the time they were brought up and then dead and buried? The answer would be, millions and millions. Can the State afford it? No. Taxpayers could well object with righteous indignation.

One argument advanced by the proponents is based upon that contention that His Excellency the Governor favors these bills. Is it possible that His Excellency has given all due consideration to the pros and cons concerning this matter before making a recommendation? We doubt if His Excellency, realizing that these bills are filled with inflated ideas, that they are socialistic, that they are unnecessary, and that the cost would be ruinous to the State, we doubt if he would still desire to advocate them. If the object of all this philanthropic chatter is to give financial aid by the State to the poor and needy expectant mother, why not say so in plain words, and legislate accordingly? No one would object to that. Time and again physicians have given their services gratuitously in such cases. We believe it is unwise to force legislation by insinuation or by passing the buck to the Governor of this Commonwealth.

No trade or profession can claim more self-abnegation than the medical profession. Physicians are far from being selfish. Day and night, they administer to the needs of the sick; the poor have always found the doctors their friends. The doctors have voluntarily coöperated in all measures which would really improve the general health and reduce accidents; knowing fully well that by so doing they were reducing their own source of revenue. They subscribe to preventive medicine; they believe in it for the sake of humanity, but when it comes to handing over the practice of medicine to State control, the physicians of Worcester North District most strongly object.

PHYSICIANS OF WORCESTER NORTH DISTRICT,
AND OF FITCHBURG MEDICAL SOCIETY.
By A. H. QUESSEY, M.D.

THE next annual meeting of the Massachusetts Medical Society will be held in Boston, Tuesday, May 31, and Wednesday, June 1, 1921.

JOINT COMMITTEE ON STATE AND NATIONAL LEGISLATION.

NATIONAL MATERNITY BENEFITS.

A bill (S3259) "for the purpose of coöperating with the States in promoting the care of maternity and infancy" and "to provide instruction in the hygiene of maternity and infancy," is to come before Congress.

The bill provides a direct appropriation of $10,000 to each State and an additional appropriation of $2,000,000 to be increased annually to $4,000,000 in five years to be divided among the States according to their population. No state, however, is to secure any of this additional appropriation unless it makes an equal appropriation for the same purpose.

A "Federal Board of Maternal and Infant Hygiene" is to be created, consisting of the Secretary of Labor, chairman; the Chief of the Children's Bureau, executive officer; the Surgeon General of the Public Health Service, and the Commissioner of Education. This Federal Board is to administer the provisions of the act and coöperate with the State Boards.

In order to secure the benefits, any state must designate some board or a division of the State Board of Health to administer the provisions of the bill, in coöperation with the Federal Board.

Section 8 of the bill provides, "That the cooperative work in promoting the care of maternity and infancy shall consist of instruction in the hygiene of maternity and infancy through public health nurses, consultation centres, and other suitable methods, and the provision of medical and nursing care for mothers and infants at home or at a hospital when necessary, especially in remote areas; and this work shall be carried on in such manner as may be mutually agreed upon by the Federal Board and any State receiving the benefits of this Act."

Section 9 of the bill provides, "That in order to provide popular, non-technical instruction to the residents of the various states, particularly to those to whom such facilities are not accessible, on the subject of the hygiene of infancy, hygiene of maternity, and related subjects, the State Board described in section 4 is authorized to arrange with the State University, land-grant college, or other public educational institution for the provision of extension courses by qualified lecturers.

Section 11 provides, "That the facilities provided by any State boards coöperating under the provisions of this Act shall be available for all residents of the State.

The other sections of the bill deal with matters of detail, section 14 providing that no money apportioned to the States shall be applied to the purchase, erection, presentation, or repair of any buildings or for the purchase or rental of any buildings or lands.

Attention is called to the ambiguity of section 8. Does it provide for the medical and nursing care for mothers and infants at home or, if necessary, at a hospital; or for care either at home or at a hospital only when for some special reason it is necessary? The bearing of this upon proposed legislation in Massachusetts is obvious.

Correspondence.

PHYSICIANS IN THE HALL OF FAME.

New York, November 10, 1920.

Mr. Editor:—

A few months ago I sent out a plea for recognition of the medical profession in the Hall of Fame and especially for Morton as perhaps the most outstanding figure in American medicine. This was published in many of our leading periodicals, and yours was one which extended the hospitality of its columns to the cause. The Boston Medical and Surgical Journal was even good enough to publish a second and more elaborate plea and reply to the criticisms which had arisen in some quarters to Morton's claims. Thus, I am sure, you have in no small degree helped in the election of Morton's name. The outcome of the recent election must be gratifying to every American physician who is familiar with Morton's life, his struggles for recognition, and the sad experience he was made to undergo by those who attacked him during life and those who, up to this time, wished to withhold the credit for his work.

Our never-to-be-forgotten Osler, with his keen sense of justice, gave us the result of his profound study of historical medicine concerning Morton's share in the discovery and promulgation of ether anesthesia in the following words: "William T. G. Morton was a new Promethus who gave a gift to the world as rich as that of fire, the greatest single gift ever made to suffering humanity." And Professor Welch confirms the investigation of his life-long friend and in one of his recent letters to me he says: "Surgical anesthesia has been America's greatest contribution to medicine and surgery, and it would be a thousand pities not to have this recognized in the Hall of Fame. As only one name can be selected for this purpose, it is clear to me that this name should be Morton." Prof. Welch was one of the electors and his influence was doubtlessly an important factor in Morton's final triumph, for from the result of the election it is evident that the majority of the electors were of the same opinion as Professor Welch.

It will doubtlessly interest the readers of the Boston Medical and Surgical Journal to know the exact outcome of this year's election of America's immortals for the Hall of Fame. Of the 178 names voted on, the following seven were chosen: Samuel Langhorne Clemens (Mark Twain), who received 72 votes; James Buchanan Eads, the engineer, 51; Patrick Henry, statesman, 57; William Thomas Green Morton, discoverer of ether, 72; Augustus St. Gaudens, the sculptor, 67; and Roger Williams, the minister, a leader in liberal religion and founder of Providence, R. I., 66. The only woman who received enough votes to place her name on the roll was Alice Freeman Palmer, the educator, who received 53 votes.

That Morton, together with our most beloved, Mark Twain, should have received more votes than any other candidate is a particularly good omen for the medical profession, and it is to be hoped that in future elections the names of our other great pathfinders in medicine and surgery may not be forgotten.

Such names as Ephraim McDowell, J. Marion Sims, Benjamin Rush, Walter Reed, all deserve a place among the immortals in America's Hall of Fame.

Sincerely yours,

S. ADOLPHUS KNOPF, M.D.

SOCIETY NOTICES.

NEW ENGLAND DERMATOLOGICAL SOCIETY.—The regular quarterly meeting of the New England Dermatological Society will be held at the Boston City Hospital Surgical Amphitheatre on Wednesday, December 15, at 3.15 P.M. Physicians are cordially invited to attend.

HENRY D. LLOYD, M.D., *Secretary.*

MASSACHUSETTS SOCIETY FOR MENTAL HYGIENE.—A luncheon, followed by the annual meeting, at the Copley-Plaza Hotel, Boston, Friday, Dec. 10, 1920, at 1 P.M.

Speakers: 1. Dr. Thomas W. Salmon, Medical Director of the National Committee for Mental Hygiene, New York: "Practical Tasks in Mental Hygiene."

2. Dr. A. W. Stearns, Medical Director of the Massachusetts Society for Mental Hygiene, Boston: "The Call for Mental Hygiene Activities in Massachusetts."

After the annual meeting of the Society will come the meeting of the Board of Directors.

RECENT DEATHS.

DR. SAMUEL JAMES MELTZER died at his home in New York, on November 7. Dr. Meltzer was born in Russia, March 22, 1851, and came to this country in 1883. He studied medicine at the University of Berlin and received his medical degree from that institution in 1882. Since 1906, Dr Meltzer has been at the head of the department of physiology and pharmacology at the Rockefeller Institute, where he discovered his method of "pharyngeal insufflation" which revived animals whose breathing and heart beats had ceased. In 1911, he announced the scientific proof of what he termed a "peripheral mechanism" for distributing substances throughout the body, aside from the circulatory system of the heart, veins, and lymphatics. He also made notable contributions to the treatment of tetanus during the war. Dr. Meltzer held the rank of major in the Medical Officers Reserve Corps. He was a member of many medical societies in this country and in Europe, and had been former president of several, including the Association of American Physicians. He was the author of more than two hundred monographs.

Announcement has been made of the death of DR. MANUEL C. BARRIOS, professor of physiology and of legal medicine at the University of Lima, Peru. Dr. Barrios organized the public health service and founded the National Academy, while a member of the National Cabinet.

DR. J. P. MORAT, formerly professor of physiology at Lyons, has died at the age of seventy-five years.

DR. EDWIN CYRUS THORN died at his home in Deerfield, November 12, 1920, suddenly, after cranking his car, at the age of 46. The son of Edwin C., and Carrie Lawson Thorne, he was born at Brattleboro, Vermont, was educated at the schools there, and was graduated in medicine at the Baltimore Medical College in 1898. The following year he joined the Massachusetts Medical Society and settled in Deerfield. He is survived by his widow, Luanna Franklin Thorn, and by four sons and two daughters.

DR. PETER JOHN CONROY of Everett, died at Randolph, N. H., where he had gone to recuperate from a severe cold, November 27, 1920, aged sixty-five years. He was a native of Maine and a graduate of the Medical Department of the University of Vermont in 1882. After taking many courses in surgery, he settled in Everett in 1895, and had a large practice, largely surgical. He was a member of the Massachusetts Medical Society and of the American Medical Association.

DR. ANGELO ORIN SQUIER died at his home in Springfield, November 25, 1920, at the age of sixty-six. He was born in Westfield, Mass., and was a graduate of the Long Island College Hospital in 1876. He practised in North Wilbraham, joining the Massachusetts Medical Society from that town in 1879. Subsequently he lived in Palmer, before taking up his permanent residence in Springfield. He was a charter member of the Eastern Hampden Medical Association and was on the staff of the old Hampden Hospital, now closed, besides being a member of the Springfield Academy of Medicine and the American Medical Association. Dr. Squier had suffered from heart disease for a few weeks and was thought to be improving when his death occurred suddenly. He was one of the first in Springfield to make use of the automobile, when it was a novelty. He is survived by his widow and by one brother, Fred P. Squier, an attorney, of Springfield.

STEPHEN WILLIAM HAYES, M.D., a Fellow of the Massachusetts Medical Society, died at his home in New Bedford, November 2, 1920, at the age of 72. He was born in County Cork, Ireland, July 24, 1848, the son of William and Mary Hayes. His early education was received at the New Bedford High School; he was graduated from the Harvard Medical School in 1870, joined the Massachusetts Medical Society the same year, and settled in New Bedford. He had been physician to St. John's Hospital. On September 16, 1882, Dr. Hayes married Mary G. McCloskey at Woonsocket, R. I.; she died the following year, leaving one child, who is now Mrs. Chrysostom J. Leary of New Bedford. On June 6, 1917, Dr. Hayes married Margaret A. Nolan, who survives him.

DR. ISADORE DYER, Dean of the Medical School of Tulane University, known for his work on leprosy and malignant skin diseases, died at his home in New Orleans, on October 12.

DR. ALPHONSE FRANÇOIS MILOT, a Fellow of the Massachusetts Medical Society, died at his home in Taunton, of hypostatic pneumonia and chronic endocarditis, November 6, 1920, at the age of 58 years.

He was born in St. Leon, Quebec, August 14, 1862, the son of Leonard and Marie Anne (Paille) Milot; his education was at Three Rivers Seminary, Quebec, and at Baltimore Medical College, where he received an M.D. in 1893, settling in Taunton the same year. He is survived by his widow, who was Agnes Barre, of Fall River, and by one daughter.

DR. FRANK JOSEPH PLUMMER died at the Peter Bent Brigham Hospital, Roxbury, December 2, 1920, of Bright's disease, aged 64 years.

The son of William G. and Josephine Plummer, he was born in Charlestown, Mass. His medical degree was obtained at the Baltimore Medical College in 1896. He settled in Malden and joined the Massachusetts Medical Society the same year. He was also a member of the Malden Medical Society and the American Medical Association. His wife died in 1906. He is survived by three daughters.

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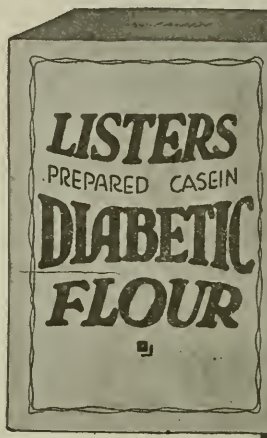

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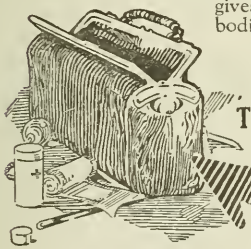

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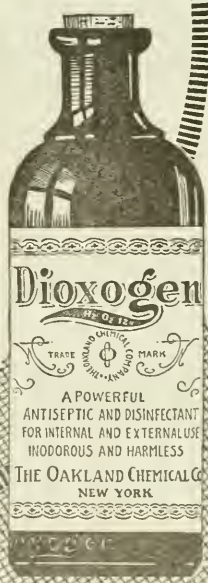

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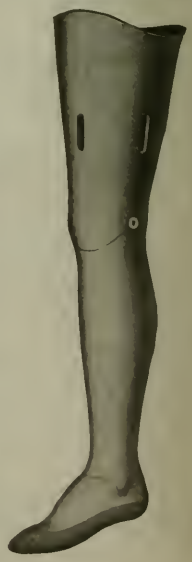

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